JPRS 84397

26 September 1983

# **USSR** Report

TRANSPORTATION

No. 125

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# USSR REPORT

### TRANSPORTATION

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#### MINISTER BUGAYEV ON TASKS, PROBLEMS FACING CIVIL AVIATION SECTOR

Moscow VOZDUSHNYY TRANSPORT in Russian 16 Jul 83 pp 1-2

[Report by B.P. Bugayev, minister of civial aviation, at a meeting of the sector command-and-management staff and party aktiv: "Results of the CPSU Central Committee June (1983) Plenum and the Tasks for Civil Aviation Stemming from the Plenum Decisions and the Program Instructions of CPSU Central Committee General Secretary Comrade Yu. V. Andropov "; date and place not specified]

[Excerpt] To Improve Work Quality.

Comrades. Having positively assessed the work of the party organizations in improving education and propaganda, the CPSU Central Committee June Plenum noted that the serious shortcomings in this matter have not been completely eliminated. Phenomena such as estrangement from practice, formalism and showy display are still seen.

These and other shortcomings pointed out by the plenum relate also to civil aviation. They exert an adverse effect primarily on the quality of our work. A high level of flight regularity, passenger services standards and discipline is not insured at all administrations and enterprises.

Much work is being done by the ministry to insure a high quality for flights. And here, a radical improvement in work with people is task number one. Aircraft captains, flight leaders and engineers—the organizers and educators of the collectives—must pay special attention to this. Their role and responsibility must be enhanced in every possible way.

This was the theme of recent meetings of aircraft captains in Ulyanovsk and Alma-Ata, of flight leaders and senior controllers in Leningrad, and engineers in Arkhangel'sk. Materials from these meetings must be skillfully used in work that is done.

The new Air Code of the USSR comes into force in 1984. A thorough study and propaganda of this basic law must be organized for aviators. And I must also mention the certification of aviation specialties conducted in October this year. It is very important to prepare for it carefully and carry it out well. The party committees and political workers should actively participate.

Strengthening Discipline: Our Most Important Task.

The importance of the line taken by the party to strengthen discipline and order, from the worker or kolkhoz farmer right up to the minister, was stressed at the CPSU Central Committee June Plenum.

Within Aeroflot enormous significance is attached to organizational and party-political work to strengthen discipline and order and organization. Most aviation workers observe discipline honestly and conscientiously. This exerts a beneficial effect on the resolution of production tasks.

At the same time, the results achieved cannot satisfy us. In many administrations and enterprises gross violations are still occurring. There are considerable losses of working time because of absenteeism. The list includes the Krasnoyarsk, Magadan, Yakutsk, Tyumen and Far East administrations, plants nos. 26, 41 and 67, construction and assembly administrations nos 21 and 22, and the Leningrad, Buguruslan and Troitsk schools. All leaders must understand that strengthening discipline is a daily, painstaking matter.

What is needed here is effort on the part of production chiefs and political workers with the support of the party, trade union and Komsomol organizations, and also the captains' councils, comrades' courts and other public organizations. This important reserve is being used poorly. An uncompromising struggle must be waged not only against violators but also against those who indulge them.

The central committee July plenum noted that all efforts to organize ideological-educational work and strengthen discipline are ultimately realized within the labor collectives. It is there that the main attention should be directed. Fulfillment of the requirements of the Law on Labor Collectives is a great help here.

Strengthening discipline is a multiple-aspect task. The main role belongs educational activity. The serious shortcomings in this and many other important sections indicate that the Administration for Political-Educational Work and its services at the local level have still not done everything needed to insure high results in ideological-political education. Greater demands must be made of command-and-management staffs and political workers. Special attention should be given to the education of leading personnel. The guarantee of success lies in constant reliance on the party organs.

To Lead Labor Collectives Responsibly.

Management staffs play a great role in educational activity and strengthening discipline. In recent years the number of economic leaders actively participating in the ideological-political education of aviation workers has increased significantly in Aeroflot. Suffice it to say that more than half of the propagandists in the sector are from the command-and-management staff.

Most of our leading workers are mature, competent people and real organizers and educators of the collectives. They include administration chiefs Kuznetsov, Konnov, Kurilo and Raschuk, aviation enterprise commanders Nikitenko and Ponomarev,

plant directors Paderov and Krivosheyev, school chiefs Bogdanov and Mityashin and construction and assembly administration chiefs Kolesnik and many others.

It states in the central committee plenum decree that "systematic appearances among the labor collectives must be considered an important duty for the leaders of party committees, ministries and administrations, and soviet and economic organizations."

Unfortunately, some of our managers have become accustomed to the office style of work. A recent comprehensive check of the East Siberian Administration showed devotion to this kind of discredited style on the part of some apparatus chiefs. They have forgotten the road to the labor collectives and their leadership is restricted to the creation of paper in the office and collecting information from where they sit.

This is an irresponsible attitude toward assignments. A check on the fulfillment of party and government directives and decisions adopted within the sector itself is being carried out. But it must be acknowledged that the work of the ministry commission at the local level is sometimes not done well. Superficial conclusions are reached. The help needed at the local level is rendered ineffectively during checks and during the course of eliminating the shortcomings that are uncovered. As a result the state of affairs in the administrations, enterprises and organizations checked is not improving.

This year the ministry commission carried out only a superficial check on the work of the West Siberian Administration. And then a check there by the USSR People's Control Committee revealed very serious shortcomings in the production activity of this administration. The chief, Sarafankin, was relieved of his duties. Or take another example. In recent years ministry workers have repeatedly worked in the Far East, Tyumen and Yakutsk administrations. Irregularities with flights and discipline have been occurring for a long time. But the necessary measures to radically improve educational activity and work with cadres have not been implemented.

Today we make note of these administrations as being among the laggards. Similar shortcomings in organizational activity are rampant among the apparatuses of many administrations and associations in the sector. This kind of irresponsible style of work must be corrected.

The effectiveness of education depends largely on the ethical outlook and personal example of the leader. It was noted at the plenum that there are still leaders who confuse their own pocket with that of the state and who abuse their official position. We also have cases of this kind, and also cases of writeups and illegal payments and instances of moneygrubbing. The bureau of the Magadan party obkom recently considered the question of instances of eyewash and misrepresentation in state accountability in plan fulfillment by leaders of the Magadan Administration. The bureau decision included a severe reprimand with endorsement of record card for its chief Yershov. The first deputy chief of the administration, Zharov, was expelled from the party ranks. A man who has deceived the state has no right to be a leader.

The central committee plenum pointed to the need to enhance the responsibility of management personnel for the educational consequences of their management activity. However, not all our managers realize the profound significance of this demand. The management of the Dnepropetrovsk aviation enterprise set out on the road of gross violations of state and financial discipline. Bad management and waste were permitted. The material incentive fund was changed into a kind of feeding trough. The commander of the Dneptropetrovsk detachment Grigorenko and his deputy for PVR [expansion unknown] Soldatenkov were dismissed from their positions. The chief of the Ukrainian Administration Goryashko and his deputy Trotsenko have been severely punished.

It is essential constantly to improve management activity and raise it to the level demanded by the party under present conditions. The plenum approved the practice of discussing questions of education at meetings of economic leaders. This party demand must be implemented in practical work, and it is essential to be close to people and know their attitudes and requirements and to react to them tactfully and in good time. Manifestations of bureacratism should not be permitted. A high businesslike sense should be displayed.

To Uncover Shortcomings More Boldly.

The CPSU Central Committee plenum devoted much attention to the means of mass propaganda. They constitute an effective tool for party ideological work.

Our sector press organs--VOZDUSHNYY TRANSPORT and the journal GRAZHDANSKAYA AVTATSIYA--are engaged in a great and important matter. They are making a weighty contribution to propaganda of the decisions of the 26th CPSU Congress and subsequent CPSU Central Committee plenums. Questions of raising the efficiency and quality of work in aviation collectives, strengthening discipline and saving aviation fuel occupy an important place on their pages.

But there are still many shortcomings. By no means all statements are of a sharp, offensive nature or distinguished by their profound content. Sometimes our press fails to draw substantiated conclusions or offer recommendations.

We should strive to make published material touch upon the most acute and urgent questions. It is essential to publish more critical statements and to reveal more boldly the shortcomings that adversely affect people's education, the fulfillment of production tasks and the strengthening of discipline. There should be more extensive publication of leading experience. The editorial boards of the newspaper and journal must fight more persistently to make their critical statements effective.

More Concern for Young Aviators

We should give special attention to work with young people. They make up as much as 40 percent of the total number of aviation workers.

We have positive experience in work with young people: the organization of political training and socialist competition. Preceptorship has been spread extensively. More than 1,000 wise educators stand in the ranks of the preceptors. Preceptors' councils have been set up at enterprises and administrations.

At the same time gross violations of discipline perpetrated by some young aviation workers have not been rooted out. A genuine concern about living and everyday conditions for young people is not being shown everywhere. This is the main reason for personnel turnover.

The role of our VUZ's and schools is exceptionally great in forming high ideological, professional and moral qualities in students and those on courses. A key role belongs to the teaching staff, especially social science teachers.

The plenum noted the serious shortcomings in the teaching of the social disiplines. They also exist in our training establishments. Many graduates have inadequate knowledge of these disciplines. Incomplete use is being made of the scientific potential of teachers in the departments of social science, and of leading teaching experience.

It must be frankly stated that the ministry Admininstration for Education and Training Establishments has weakened attention to and control over the quality of training for social science teachers. The training and methodological office also remains aloof. It is essential to take steps immediately to eliminate these serious shortcomings.

The question of young people's free time is a very urgent one. Far from everyone sees in this a source for their spiritual and moral growth. Commanders and political workers and the trade union and Komsomol committees should significantly galvanize their activities on this important sector of the communist education of young people, temper them in work, instill steadfastness in difficulties, and oppose parasitic and consumer attitudes.

It was stated at the plenum that our enemy uses for his own ends the special features of the psychology of young people. It is essential to wage a tireless struggle against this. They must be firmly immunized against any ideological sabotage and instilled with high political vigilance.

The international situation dictates the need to reinforce attention on militarypatriotic education for young people. They should be educated in the heroic, revolutionary, combat and labor traditions of the party and people.

Aeroflot's Higher International Authority.

Comrades. Out party and government pursues Leninist foreign policy firmly and consistently. Its practical implementation, and also measures to maintain the country's defense capability and the security of its allies at the necessary level were unanimously approved by the session of the USSR Supreme Soviet.

The Moscow meeting of leading party and state figures from the Warsaw Pact member countries evoked a great political resonance in the world. In the joint statement issued it was stressed that those participating in the meeting will not permit military superiority over them under any circumstances.

The CPSU Central Committee plenum noted that the struggle between the two social systems has now been exacerbated in a way unprecedented throughout the

entire postwar period. Psychological warfare unprecedented in scale and effrontery is being waged against the Soviet Union and the socialist countries. Hence, today special importance attaches to the class tempering of the workers and uncompromising struggle against bourgeois ideology.

The development of our international air routes is taking place in these considerably more complicated conditions. Aeroflot flies to 117 cities in 94 countries. We have 120 representing offices abroad. Each year millions of foreign passengers are carried on the international and domestic routes. And at the same time Aeroflot has become a target of Washington's supercharging of the total psychological war against the Soviet Union. It tries to ascribe to Aeroflot a "supermilitarized" character. Fabrications are spread that it is guided in all its activity primarily "by political and military considerations."

It is quite clear that this kind of lie serves to supercharge anti-Soviet hysteria. The task of delivering a blow to Aeroflot's competitiveness on the international routes is not last in the considerations here. Under these conditions our task is to unmask the infamous lie about Soviet civil aviation.

In the representative offices abroad the 60th anniversary of the USSR and Aeroflot was marked by photographic exhibitions that enjoyed great success. At the same time the newspapers also reported attempts made by criminals to seize and hijack Soviet aircraft. We are talking about the hijacking of an An-24 in Turkey in November 1982. Recently, another hijack attempt was made to take an aircraft of the Estonian Administration abroad.

The increasingly frequent attempts by criminal elements to seize and hijack aircraft require that we enhance our responsibility for passenger safety, because what we are talking about is people's lives and the prestige of our country and its civil aviation.

To Improve Work Efficiency and Quality.

No matter how varied the tasks facing the party and the country, in total they come to one thing--insuring improvement in the well-being of the workers and creating the material conditions necessary for this. This means that it is necessary to steadfastly fulfill plan tasks and improve work efficiency and quality.

The first half of the year is now completed. Its results indicate that the direction has been maintained in the predominantly intensive development of civil aviation. Most administrations have coped with their tasks and socialist pledges. It is noteworthy that their fulfillment has been insured through improvements in the use of the aircraft inventory for commercial freight. Work has been done ahead of time for a successful completion to the year.

During the first half of the year the increase in the volume of air freight declined slightly so as to be able to satisfy demand more fully during the third quarter. Notwithstanding, the indicators for intensity in the development of civil aviation could be rather higher. I shall deal only with the key tasks in improving work efficiency.

1. The decisive condition is improving efficiency in the use of fuel. During the first half of the year we saved tens of thousands of tons. Fuel expenditure also declined compared with last year. It is essential to further reduce fuel expenditures per unit of work, increase commercial loads and flight productivity, and seek out news ways for saving fuel.

Stability in our work depends increasingly on the timely availability of fuel. Here there must be close business-like contacts with suppliers and the railroad. I should also mention the need for zealous exploitation of fuel resources. The closest attention must be given to this matter.

- 2. Further development of the ground material-technical base is a most important condition for improving the efficiency of our work. At one time we took steps to construct runways for the I1-62. Now we must build runways capable of taking the Tu-154, especially in the north. The range of flights undertaken by the I1-86 must be extended.
- 3. It was emphasized at the central committee plenum that the search for new management methods is impossible without the formation of a new type of economic thinking. One inalienable feature of such thinking is a businesslike and zealous attitude toward the national good and the thrifty use of all kinds of resources. This year a check on the financial-management activity of a number of administrations has shown instances of bad management. This significantly lowers opportunities for production intensification and exerts an extremely adverse effect on education and the moral status of collectives. Elimination of all these defects is our most important party and state task.
- 4. At the CPSU Central Committee June Plenum comrade Yu.V. Andropov stressed that "in the economic sphere the key task is a major improvement in labor productivity..." The main direction here is the consistent transfer to the intensive path of development and improvement in the scientific organization of labor.

We must bring order to what we have and insure the rational utilization of production and scientific and technical potential. We must actively develop the brigade form of labor organization. We must reduce the proportion of manual labor ...nd introduce comprehensive mechanization.

5. Raising the technical-economic level of civil aviation and fuel effectiveness is connected wit the development of new aircraft and helicopters and modernization of the existing inventory. Much needs to be done to improve the quality of equipment in operation.

The activity of our head institute, the State Scientific Research Institute, was checked in May by the comprehensive commission. The leadership of the Main Scientific and Technical Administration and the institute must bring scientific research closer to practical needs of Aeroflot and substantially increase their results. In the interests of production, broader use must be made of the scientific potential of the VUZ's.

In conclusion, comrades, I would like to say that the party demand for further improvements in all organizational and political work obliges us to consider

in a new way many aspects of our practical activities and to reveal shortcomings more boldly and decisively eliminate them. Today, the scientific approach, a high businesslike and specific attitude and constant reliance on the masses are the most important requirements in the style and methods of our work.

Comrades, permit me to express the confidence that the captains of production and the political workers, and the party, trade union and Komsomol organizations of Aeroflot will do everything necessary to carry out the decisions of the CPSU Central Committee June Plenum, and this is the guarantee of the successful resolution of the tasks set by the party and government for civil aviation!

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MINISTER BUGAYEV ON NEW CIVIL AVIATION CODE

Moscow IZVESTIYA in Russian 1 Jun 83 p 2

[Article by B. Bugayev, USSR minister of civil aviation: "The Civil Aviation Law"]

[Text] The Presidium of the USSR Supreme Soviet has approved the new Aviation Code of the USSR, an important document which establishes the basic principles and standards in civil aviation operations. Tracing back to the Leninist Decree on Air Travel (1921) and the Aviation Codes of 1932, 1935 and 1961, it reflects our country's rapid development in all areas of political, economic and social life, including the field of aviation.

In our country an important role is played by transportation, including air transportation, in the successful solution of large-scale national economic problems. Civil aviation is actively contributing to the country's economic and cultural progress, implementation of the Leninist national policy, and to consolidation of the fraternal friendship of the peoples of the USSR.

In the more than 20 years that the Aviation Code of 1961 has been in effect, important qualitative changes have taken place in Joviet civil aviation. It has been turned into a highly developed, multipurpose and profitable sector of the national economy. Its material and technical base has been significantly expanded and reinforced. Modern airliners such as the Il-86 and the Yak-42 have begun service in civil aviation.

This year, 80 percent of all flights will be made in I1-62, Tu-154 and Tu-134 aircraft. Last year alone, more than 100 million man-days of socially useful time was economized in passenger flights.

A farflung network of airports has been established. Airways have firmly linked the country's center with the regions of Siberia and the Far East, the Far North and Central Asia. Carrying more than 100 million passengers annually, air transport has become a popular means—and the principal means on remote trunk routes—of passenger transportation.

Aviators make a great contribution in the explcitation and development of the oil and gas deposits of Tyumen and Western Siberia. In improving the fields' crop yield, our agricultural aviation, which carries out nearly 40 percent of all chemical treatment operations on the country's fields, is doing a great deal to put the Food Program of the USSR into effect. As a whole, civil aviation has become an integral technological link in the production process of many sectors of the national economy, which unquestionably increases the importance of the Aviation Code of the USSR for the economy of the entire country.

Important qualitative changes also have taken place in other spheres of activity in Soviet aviation, which has required new legal forms for its regulation. This refers primarily to standards for the airworthiness of airliners and the suitability of airports, certification of airliners and airports, and new legislation on administrative law violations developed after the issuance of the Aviation Code of 1961.

The sector's system of administration, as well as of state control and supervision aimed at improving flight safety, has been improved. The Ministry of Civil Aviation was established in 1964, and the State Commission on Flight Safety and the State Aircraft Register were formed in 1973. A Unified Air Traffic Control System is being established.

International air communications have been extensively developed. They are of importance in expanding the Soviet state's economic and political ties with foreign countries. Aeroflot conducts scheduled flights to 117 points in 94 countries of the world. A reliable air bridge has been built to many states in Asia, Africa and Latin America which have embarked on the path of independent development.

In 1970 the USSR joined the International Civil Aviation Organization, which unites 150 states. Many standards developed by this specialized institution of the United Nations have been recognized and are being used in Aeroflot's practical operations. Our country has adhered to a number of international multilateral agreements. Quite a number of new bilateral agreements have been concluded on matters of civil aviation operations.

An active process of improving legal regulation of collaboration in the field of civil aviation with fraternal socialist countries which are members of the Council for Mutual Economic Assistance is being continued.

The provisions of the Aviation Code of the USSR have been brought into conformity with the Constitution of the USSR, the decisions of Communist Party congresses, CPSU Central Committee Plenums, and with new legislative acts and commitments of the USSR under international treaties.

In view of the increasing interdependence of the various types of aviation in the USSR in the shared use of airspace, the code provides, in addition to the articles which are binding for aircraft of all ministries, state committees, departments and organizations, for approval of a new document—the Statute on Utilization of USSR Airspace, which has been called upon to resolve practical

problems in the air transport operations of the USSR and which will organically supplement and amplify provisions of the Aviation Code.

Compulsory requirements for standards of airliner airworthiness and the suitability of airports and their equipment have been established with the aim of improving flight safety. A stricter procedure for the registration of airliners and airports and for their authorization to operate is being legislatively consolidated.

The objectives and functions of the State Commission on Flight Safety and the State Aircraft Register of the USSR, the Unified Air Traffic Control System and the Unified Search and Rescue Service of the USSR are reflected in the code.

The services and privileges granted by air transport have been expanded significantly; these include ensuring accurate information on airliner flights; provision of hotel accommodations for a passenger when there is a flight delay for which Aeroflot is responsible; returning the fare to a passenger not only when he is ill, but when a member of his family accompanying him on the aircraft is ill; airliner seat reservation, including from a transfer airport and on the return flight; and others.

The provisions which concern the use of aircraft in the national economy have been further amplified. The basic rights and obligations of the sides in a contract to conduct air operations are being legislatively consolidated—this is important for timely and high-quality implementation of the far-reaching plans for the further development of agriculture in the USSR.

Requirements for foreign airlines with respect to the struggle against aircraft high lacking have been established. They also must not violate the commercial rights and rates in effect granted to them in the USSR.

With the aim of ensuring flight safety and preventing misappropriations and other law violations in air transport, fines for administrative law violations have been stipulated in the code which have been increased in comparison with the 1961 code.

Taking into account the need for further reinforcement of the discipline, procedure and extent of organization in transportation, a provision has been stipulated under which civil aviation employees bear strict disciplinary responsibility for administrative law violations committed by them in performing their official duties.

These standards of the Aviation Code, together with the Regulations on Discipline now in force in civil aviation, will contribute to further reinforcement of discipline and socialist law and order in air transport.

The new Aviation code stipulates intensive measures to bring all departmental standardized documents into conformity with it, the study and correct application of its provisions by operational employees, and a definite reorganization

of the methods of administration of USSR civil aviation. Timely fulfillment of these tasks requires maximum organization, businesslike efficiency, and dedication at all levels of civil aviation administration.

The new Aviation Code, which comes into force on 1 January 1984, becomes an integral part of the activity being conducted under the leadership of the party and the government to put economic legislation in order and to reinforce socialist law and order. Its provisions will contribute to more active participation by civil aviation in carrying out the basic objectives of transport, defined by the party's 26th congress—more complete and timely satisfaction of the requirements of the national economy and the people for transportation, improvement in its efficiency and the quality of its work.

8936

#### LENINGRAD'S PULKOVO AIRPORT OPENS NEW RUNWAY

Moscow VOZDUSHNYY TRANSPORT in Russian 23 Jul 83 p 1

[Text] Quite recently our paper reported that a VPP [runway] had been put in operation in Yakutsk. And now a new runway has been commissioned at Pulkovo Airport in Leningrad. Proving flights already have been conducted on the new runway by Leningrad and Moscow aviators in Tu-154 and Il-86 aircraft, and in August it will begin regular use.

The construction project at the airport has been under the constant supervision of local party and soviet organs. Every possible assistance has been given to the aviators and construction workers.

"The new runway," stated L. Agoshin, first deputy chief of the Leningrad UGA [Administration of Civil Aviation], "has been designed to accommodate all types of domestic and foreign aircraft. Scheduled flights will be made from here not only to many cities in our country, but to airports in foreign states as well. At present, Moscow crews are flying from Pulkovo Airport in the 350-seat widebodied Il-86. But aviators from Leningrad themselves, who have also have mastered this complex aircraft, will begin in them this year."

The new runway is parallel to the old one which is now being used. With the beginning of its use, air traffic control conditions are being significantly improved, the airport's traffic capacity will be increased, and the time spent by aircraft holding for takeoff and landing will be reduced.

The new runway will begin operation in August, and minor repair is being planned for the old one, which has served well for a number of years. When repairs have been completed at Pulkovo, both runways will be operational, which will make it possible to maintain the airport in constant operational readiness. This is especially important during the fall and winter period with its poor weather conditions. In the future it is planned to equip the new runway with the landing facilities which comply with ICAO [International Civil Aviation Organization] Category II requirements. This will have a substantial effect on further improvement in flight regularity and will be one more important step to ensure that our civil aviation becomes less and less dependent on the vagaries of weather.

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REGULAR TASHKENT-KABUL AIR SERVICE INITIATED

Moscow VOZDUSHNYY TRANSPORT in Russian 19 Jun 83 p 3

[Sh. Zaynutdinov report: "A New International Route"]

[Text] On 17 June regular passenger services with the Tu-154 started on the Tashkent-Kabul-Tashkent route, operated by crews of the Uzbek Administration of civil aviation.

During the Twenties the young Republic of Soviets helped friendly Afghanistan to set up its civil air fleet, providing aircraft, equipment, fuel and servicing equipment, and training aviation specialists at the flying school set up at that time in Kabul. In the late Twenties Aeroflot started regular flights to the Afghan capital. This was a route of friendship. And it still is today.

For Uzbek aviators the route has become their first international route. The first flight along the 930 kilometers passing over the snowy peaks of the Gindukush was entrusted to a Tu-154 commanded by deputy commander of the flying collective of the Tashkent aviation enterprise A. Ernazarov and aircraft captain A. Brikun. They were assisted on the flight by second pilot M. Bakhramov, navigator B. Sviridov, flight engineer Yu. Bedrin and radio operator V. Deryugin. The team of stewards was led by Komsomol member A. Zeytullayeva.

The first passengers were tourists and diplomats, young Afghan men and women studying in VUZes in Uzbekistan, and Soviet specialists helping to construct national economic projects in the friendly state.

One-and-half hours later the Tu-154 landed at Kabul airport. A short rest and then, with new passengers aboard, the aircraft flew off on the return leg.

The new route of the Uzbek aviators will operate during the period of heavy summer traffic from June through September. The flight will leave for Kabul every Friday.

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AIR TECHNICAL BASE IN ROSTOV-ON-DON LOSING YOUNG WORKERS

Moscow VOZDUSHNYY TRANSPORT in Russian 19 Jun 83 p 2

[Article by V. Valeyev, aviation technician: "Why Are the Young People Leaving?"]

[Text] Rostov-on-Don--I work at the air technical base of the Rostov enterprise. You might say that it has no equal. But it is a special case. Despite the substantial improvement in the equipment/worker ratio at the enterprise and the scales of production, in recent years personnel turnover has been observed. Moreover, as a rule the greatest turnover is precisely among young workers.

I think I am not wrong in saying that the air technical base has become a unique kind of "personnel forge" for the city. And personnel are highly skilled. For we are the preceptors and we train them to work well.

I think that the main reason lies not only in the long list for apartments and dissatisfaction with wages. There is a mass of "trivia" that do much to promote this process. They are connected mainly with the organization of labor. For example, we have no sizeable group for production training. Long periods must be spent in the warehouses trying to find essential parts for aviation equipment. There is much manual labor. Much time is spent preparing working places. These difficulties are affecting the quality of aircraft servicing.

The opinion is being formed that the enterprise managers see the main reason for the shortcomings in the carelessness of the air technical base chiefs. Accordingly, they frequently replace them.

Is it not high time to address organizational questions and pay more attention to the needs of the air technical base collective? Particularly, I repeat, the young people.

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#### TOGO SIGNS AIR SERVICE AGREEMENT WITH AEROFLOT

Moscow VOZDUSHNYY TRANSPORT in Russian 19 Jun 83 p 3

["Own information" report: "In the Interests of Further Cooperation"]

[Text] As we have already reported, on 17 June an intergovernmental agreement on air services between the Soviet Union and the Republic of Togo was signed at the Ministry of Civil Aviation. The agreement was signed by M.A. Timofeyev, deputy minister of civil aviation and P.Y. Tchalla, the Togo minister for commerce and transport.

Thus, Togo has become the 101st state in the world with which the Soviet Union has an intergovernmental agreement on air services.

A delegation from the Republic of Togo was in Moscow in connection with the signing of this important document. The delegation was made up of the director of the department of international cooperation at the Ministry of Foreign Affairs (K. Aboki) and the director of the department of civil aviation in Togo (K. Valla).

Speaking at the ceremonial signing, M.A. Timofeyev welcomed the guests from Togo and conveyed to them best wishes from the USSR minister of civil aviation, Chief Marshal of Aviation B.P. Bugayev. M.A. Timofeyev expressed the conviction that the signing of this agreement and its implementation will make a weighty contribution to the development of friendly relations between our two countries.

In his reply P.Y. Tchalla expressed his thanks for the warm reception, stressing that the hospitality of the Soviet people, of which he had heard a great deal, has surpassed all his expectations. The Togo minister also noted the great political significance of the document signed and its important role in the further development of cooperation between Togo and the Soviet Union.

"We hope that in the near future we shall have an opportunity to receive a Soviet delegation in Lome," P.Y. Tchalla said in conclusion, "in order to demonstrate the feeling of friendship that the people of Togo have for the Soviet people."

In accordance with the provisions of the intergovernmental agreement, the sides have equal rights in operating the air routes linking the capitals of our countries. Moscow and Lome.

It should be noted that the agreement on air services is the first document signed between the governments of the Soviet Union and the Republic of Togo. Its entry into force will undoubtedly be of great significance not only for the development of air communications but also for the expansion of economic, trade and cultural relations between our countries.

Togo is the 37th state in Africa to conclude an agreement on air services with the Soviet Union.

The ambassador of the Republic of Togo to the USSR (L. Kerim-Dikeni) and USSR Ministry of Internal Affairs department chief V.A. Likhachev were present at the signing ceremony.

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IL-62'S USE FRUITS, VEGETABLES AS BALLAST ON UNDERUTILIZED PASSENGER FLIGHTS

Moscow VOZDUSHNYY TRANSPORT in Russian 21 Jul 83 p 1

[Text] Specialists of the transportation services of the Moscow Transport, Uzbek, Magadan and Far East Administrations of Civil Aviation are conducting an interesting experiment these days. They are using I1-62M passenger airliners along with I1-76, An-12 and I1-18 cargo aircraft to ship vegetables and fruits grown by farmers in Tashkent Oblast to the shores of the Pacific Ocean.

What has given rise to this?

This is the usual situation in the high-volume summer traffic season. On the Moscow-Magadan and Moscow to Petropavlovsk-Kamchatskiy routes, there are very few passengers now (and often the seats are empty altogether). For this reason, water has to be taken as ballast by the trunk-route II-62. The return flight is full. This is also understandable: vacationers are occupying the seats. At the same time, there is high demand by passengers, including tourists, for air routes connecting Moscow with Uzbekistan and Uzbekistan with cities in the Far East.

Civil aviation specialists closely studied the urgent problem of efficient use of the aircraft fleet and fuel in order to ship above-plan vegetables and fruits more rapidly at the request of fishermen in Magadan and Kamchatka Oblasts. It was decided to conduct an experiment. This is the essence of it.

The headquarters for fruit shipments of the Uzbek Administration notifies the TsPDU MGA [Central Production and Traffic Control Administration of the Ministry of Civil Aviation] beforehand of a cargo flight being planned to the shores of Nagayev and Avachinskaya Bays. An Il-62M airliner makes an additional flight from Moscow to Tashkent, takes 12 tons of fragrant cargo on board here, and flies to Magadan or Kamchatka. At the same time half of the cargo is stored in the luggage bays, and the other half is put in the first cabin, where the seats are protected with safe covers. At the same time the aircraft can take up to 50 passengers who want to go directly from Tashkent to the Pacific coast. The crew turns over the cargo to representatives of "Magadanprodtovarov," "Magadanrybolovsoyuz" or "Kamchatrybolovsoyuz," rests, and takes the Far East passengers back to Moscow.

The I1-62M airliners already have made 14 flights on these two gigantic circular air bridges, have carried thousands of passengers, and have delivered to their destination more than 160 tons of plums, tomatoes and apples stored at the "Almazar" and "Kibray" sovkhozes and the sovkhoz imeni U. Yusupov of the Tashkent Agroindustrial Association of the UzSSR Ministry of the Fruit and Vegetable Industry. In the near future it is planned to send another 60 tons of the South's gifts to fishermen of the Far East on board the I1-62M's.

In that way, the opportunity has appeared to better allocate cargo aircraft and direct them to other routes on which the planned production of the orchards and gardens of Uzbekistan is sent to the country's East and Northeast, in accordance with the program for deliveries for the unionwide fund. Over the past 4 months, more than 4,000 tons of vegetables and fruits have been shipped from the airports at Tashkent, Andizhan, Bukhara, Samarkand and Fergana.

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#### BRIEFS

CIVIL AVIATION MINISTRY MEETING—On 10 June a meeting took place at the Ministry of Civil Aviation between the First Deputy Minister of Civil Aviation B. Panyukov and a delegation from the Argentine Republic led by V. Yokka, director of the Argentine state air lines. During the course of the meeting the sides discussed questions of further cooperation in the field of air transport between the Soviet Union and Argentina. E. de la Guardia, Argentine ambassador to the USSR, and Yu. Vol'skiy, department chief at the USSR Ministry of Foreign Affairs, took part in the meeting. [Text] [Moscow VOZDUSHNYY TRANSPORT in Russian 11 Jun 83 p 1] 9642

LIPETSK HELICOPTER SERVICING PROBLEMS--Today many problems face the aviation technical base collective at the Lipetsk enterprise. Labor productivity is growing slowly, there is considerable personnel turnover, and the above-normative servicing times for aircraft are giving cause for alarm. So we decided to try to work on a new system. Now many people, including VOZDUSHNYY TRANSPORT, are writing about the great possibilities of the brigade method. Why not introduce it here with us, in the section that services Mi-2 helicopters? We proposed this at a working meeting. But management did not support us. They thought that the innovation would adversely affect work quality. And things came to nothing. How can this be? Positive experience has been gained in many collectives. It inspires the thought that the production commanders themselves have no confidence in the new method and have failed to see in it any reserve for improving work efficiency. [By V. Tikhonov] [Text] [Moscow VOZDUSHNYY TRANSPORT in Russian 19 Jun 83 p 3] 9642

AIR FREIGHT UNLOADING DELAYS—We aviators are trying to make our contribution to implementing the Food Program by delivering fruit and vegetables to their destinations as quickly as possible. On 7 July our An-12 took off at 1600 hours from Rostov—on—Don for Chelyabinsk. On board were about 12 tons of fine cherries. They knew about fruit flight No 30085 bound for Chelyabinsk. The radio message was received from the Don in good time. But it became clear that no one had made preparations to accept the freight. A day passed, and still the cherries remained aboard the aircraft. We, the crew, received no better attention. We sat on benches in a square until late into the night waiting for them to accept us at the hotel. They found accommodation for us. And the cherries? They were virtually useless for whoever needed them. An aircraft is not a refrigerator. [By Ye. Teterin] [Text] [Moscow VOZDUSHNYY TRANSPORT in Russian 12 Jul 83 p 3] 9642

NEW SHEKI AIRPORT BUILDINGS--A new airport terminal is now in operation in the ancient Azerbaijan city of Sheki. It has everything needed for passengers' requirements: a sunny, spacious waiting room, rest rooms for air travellers, ticket desks, check-in sections, and a buffet dining room. The building is crowned with the glass gallery of the control tower. The runway has been rebuilt and extended to take modern aircraft. New radio navigational equipment has been installed. [By G. Pogosov] [Text] [Moscow VOZDUSHNYY TRANSPORT in Russian 7 Jul 83 p 3] 9642

IL-86 FLIES CUBA ROUTE--on 19 July a wide-bodied Aeroflot Il-86 made the transatlantic flight to the Cuban capital Havana. This is the first route to the Latin American continent inaugurated by the Aeroflot flagship. The Moscow--Shannon--Gander--Havana flight is more than 10,000 kilometers and it was completed by two crews from the Central International Air Services Administration: the Moscow--Shannon leg was flown by the crew of honored pilot of the USSR Yu. Ovsyannikov (second pilot V. Revyakin, navigator M. Nikonov, flight engineer V. Rasshchupkin) and the Shannon--Gander--Havana leg by a crew commanded by V. Odinets. The aircraft took off at 1310 Moscow time and landed in the capital of the island of freedom at 2210 Havana time. Flight time was 13 hours 20 minutes. Havana is the 34th city in the world at which the Il-86 has landed. [Text] [Moscow VOZDUSHNYY TRANSPORT in Russian 21 Jul 83 p 1] 9642

FUEL, HYDRAULIC SYSTEM CLEANERS -- Kiev -- A scientific and practical seminar devoted to the problem of ensuring the cleanliness of airliners' fuel, lubricant and hydraulic systems was conducted by the Kiev Institute of Civil Aviation Engineers and the republic's House of Economic and Scientific-Technical Propaganda of the Znaniye Society; 42 lectures and 14 reports were heard. Work experience in ensuring and monitoring the industrial purity of products was reviewed in statements by V. Berber, Ye. Tumanov, A. Osin and V. Zadarozhnyy. A group of Kuybyshev scientists headed by L. Loginov delivered a number of lectures devoted to the prospects for automating the monitoring of aircraft fuel and hydraulic system cleanliness, and reported on new instruments for automatic monitoring. Kiev researchers familiarized the seminar participants with the fundamentally new designs of the cleaners and separators of pressure fluids developed by the KIIGA [Kiev Order of the Labor Red Banner Institute of Civil Aviation Engineers] and patented in a number of foreign countries. Many of the speakers pointed out that the problems being reviewed are being resolved slowly, and that there is no single center which coordinates scientific research. Considering the problem's importance, it was decided to publish the seminar materials in a separate collection. [Text] [Moscow.VOZDUSHNYY TRANSPORT in Russian 26 Jul 83 p 1] 8936

DECORATIONS FOR MINISTER BUGAYEV--Ukase of the Presidium of the USSR Supreme Soviet on the decoration of Comrade B. P. Bugayev, Hero of Socialist Labor and USSR minister of civil aviation, with the Order of Lenin and the second "Hammer and Sickle" medal. For great services to the Soviet state in the development of civil aviation and in connection with his 60th birthday, to decorate Comrade Boris Pavlovich Bugayev, Hero of Socialist Labor and USSR minister of civil aviation, with the Order of Lenin and the second "Hammer and Sickle" medal. In commemoration of the labor exploits of Hero of Socialist Labor Comrade B. P. Bugayev, to erect a bronze bust of the Hero in the motherland. [Signed] Yu. Andropov, chairman of the Presidium of the USSR Supreme Soviet, and T. Menteshashvili, secretary of the Presidium of the USSR Supreme Soviet. Moscow, the Kremlin, 25 July 1983. [Text] [Moscow VOZDUSHNYY TRANSPORT in Russian 30 Jul 83 p 1] 8936

GDR AWARD TO BUGAYEV--TASS--GDR Ambassador to the USSR E. (Winkelman) presented Ch Mar Avn B. P. Bugayev, USSR minister of civil aviation, with the gold order "Star of the Peoples' Friendship" on 1 August. He was awarded this decoration for services in the development and consolidation of friendship between the USSR and the GDR. [Text] [Moscow VOZDUSHNYY TRANSPORT in Russian 2 Aug 83 p 1] 8936

#### MOTOR VEHICLES AND HIGHWAYS

#### RSFSR DEPUTY HIGHWAYS MINISTER REVIEWS MINISTRY'S PLANS

Moscow GUDOK in Russian 2 Apr 83 p 4

[Article, published under the heading "Our Transportation Colleagues," by APN correspondent M. Kubeyev, based on an interview with RSFSR Deputy Minister of Highways A. Nadezhko: "The Highway System Is Growing"]

[Text] Expansion of our highway system, continuous improvement of highways, and increase in the size and power of our trucks are helping us accomplish to-day's most crucial economic tasks. Trucks today haul four fifths of all goods in this country. Roads link 350,000 towns and villages which have no other land lines of communication, localities with a total population of more than 50 million persons.

In his speech at the official joint meeting of the CPSU Central Committee, USSR Supreme Soviet, and RSFSR Supreme Soviet dedicated to the 60th anniversary of establishment of the USSR, CPSU Central Committee General Secretary Comrade Yu. V. Andropov once again addressed the problem of transportation: "Transportation plays a very special role in such a vast country as ours. It also plays an economic, a political and, if you will, a psychological role.

"Without a smoothly functioning transportation system it is very difficult to ensure both accelerated development of all republics and further deepening of their economic cooperation."

Soviet industry has advanced far into the North and the Far East since the beginning of the 1960's. Aggressive development of remote regions began, young cities were born, and special tasks were assigned to transportation, particularly motor transport.

Naturally special roads are required for accelerated development of the oil and gas producing areas of Western Siberia -- solidly-built roads which resist the action of freezing temperatures. And such roads are being built. Not long ago our ministry and kindred ministries in a number of other union republics, including the Ukraine and Belorussia, came forth with an initiative calling for building new roads in Tyumen Oblast and neighboring oblasts. In view of the harsh climatic conditions in that region, road designs involving precast, prestressed road surfaces were employed for the first time in road construction practice. A total of 500 kilometers of such roads were built and put into

service in 2 years time. Of course road construction is accelerating the work pace along oil and gas pipeline routes.

Construction of a good highway with an improved surface is a capital-intensive undertaking. Harsh climatic conditions and difficult mountain topography require both reliable equipment and considerable material resources. A kilometer of highway on the flatland usually costs 300-400 thousand rubles, while on swampy or mountainous terrain the cost usually runs several million. All costs are recouped in time, however.

Today the pace of construction of h. hways is fairly rapid. In recent years alone our ministry's organizations have built and brought into service approximately 10,000 kilometers of new roads. As of the beginning of 1982 the Russian Federation contained more than 350,000 kilometers of hard-surface public roads. New, modern highways have appeared on the map of our republic, such as the Moscow-Volgograd-Astrakhan highway and the Irkutsk-Ulan-Ude-Chita highway. The total length of public roads in the USSR presently exceeds 1.5 million kilometers.

Nevertheless, the economy's transportation requirements are running considerably ahead of growth of our road system. There are substantial reasons for this.

High-powered trucks of various makes are added each year to this country's truck fleet. Utilization of 5-ton, 8-ton and larger trucks is strongly affecting centralized intercity freight hauling. In the future vehicles of this size will comprise more than 30 percent of the total number of trucks. All this will steadily increase the traffic load on our roads and cause excessive loads on the road surface.

The party and government devote considerable attention to the matter of maintaining, modernizing and widening roads. Three years ago the CPSU Central Committee and USSR Council of Ministers issued a decree entitled "On Measures to Improve Construction, Repair and Maintenance of This Country's Motor Roads." Highway builders are faced with a large and difficult task — essentially to complete by 1990 construction of a basic network of improved-surface main highways. In conformity with the USSR Food Program, a total of 280,000 kilometers of new roads are to be built in rural areas. Hard-surfacing all major roads would make it possible in the future, according to calculations by the USSR Academy of Sciences Institute of Economics, to boost substantially vehicle productivity and to reduce truck requirements for the country as a whole by 1.2 million.

Naturally such an ambitious task should be accomplished jointly and the following ministries have been enlisted to implement it: the Ministry of Construction, Road, and Municipal Machine Building, the Ministry of Chemical Industry, and others.

New, high-output equipment is already being used to build cement and concrete surface roads. These include aggregates of highly mechanized machinery with automatic adjustment of road surface layer flatness and thickness. Rate of construction has reached 1 kilometer per working day, with a roadway width up to 7.5 meters. .ome new highways are from 4 to 8 lanes and incorporate the most advanced control system.

In addition, we are conducting extensive road diagnosis. While in the past uneven spots and cracks on asphalt-concrete highways were corrected primarily by adding new surface layers, today, in order to preserve the lower layer of valuable construction material, we are transitioning to the method of road surface regeneration. New regenerator machines are already operating in Moscow. Soon they will also appear on the streets of other cities.

Our roads must meet today's demands and be long lasting -- that is the direction in which we are working.

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#### MOTOR VEHICLES AND HIGHWAYS

RSFSR MINISTER OF HIGHWAYS ON PROGRESS IN HIGHWAY CONSTRUCTION

Moscow NEDELYA in Russian No 21, 23-29 May 83 pp 2-3

[Interview with A. A. Nikolayev, RSFSR Minister of Highways, by Kirill Rodin; date and place not specified: "Everything Begins With the Road"]

[Text] At first we talked about things not directly related to the subject of this interview -- about a new novella and about the fact that serious literature ignores road builders. "They do not notice them, just as they do not notice a good road. Although their labor is noble, romantic, and courageous," the minister commented. "But they certainly give plenty of attention to auto collisions." I then related to him how, in preparing for this interview. I had traveled the roads of Kirov Oblast: you are driving at night, and suddenly you hit a meter-high mound of asphalt, who knows how it got there -- such "diversions" are produced in the spring by groundwater. "Nature should not be blamed," the minister sternly commented. "The road builders are to blame. If a road is built properly, it will not heave. We know how to combat road heaving .... What kind of a vehicle were you driving?" "A land rover type vehicle, and later a tractor," I replied. "Aha," the minister grinned. "Now I see how you got all the way to Kilmez.... Russia's age-old plague of bad roads has not yet been overcome in that distant corner of Kirov Oblast, a problem, incidentally, aggravated precisely by modern off-road vehicles and tractors...." At this point I asked a question for the sake of which I had come here to the RSFSR Ministry of Highways.

[Question] Aleksey Aleksandrovich! Everybody knows that roads are important, necessary, essential. And everybody knows that they are the vital "arteries" and "capillaries" of our economy, and that the social problems of the village cannot be solved without them. In short, everybody is in favor of roads. But could you please explain why, when everybody has long been in favor of roads, the road problem continues to be acute, as they say?

[Answer] Very well, I shall give you an answer. Later. But first, I shall ask you a question: do you know what a highway is? How it is built? Of what components it consists?

[Question] Alas, I do not....

[Answer] Then let me say a few words about the object of our conversation from the engineer's point of view, because a highway is first and foremost a complex man-made structure. You see, all roads are subdivided into several categories. Multilane highways with a median divider strip are designated category I, the highest category. The roadway of main highways consists of several layers of natural and synthetic materials: a sand-and-gravel mixture or sand strengthened by cement, and sturdy crushed rock (but other materials can also be used). All these layers comprise the so-called roadbed. It is primarily the roadbed which determines a road's capability to handle heavy trucks and buses all year round without damaging the roadway. After the roadbed is down, we proceed to lay the road surface -- the top layer on which vehicles wheels roll. On main highways the surface is of bituminous concrete or of cement concrete. Materials in the following amounts are required to build one kilometer of fourlane main highway: 850 tons of cement, 180 tons of rolled metal stock, 1,250 tons of asphalt, 490 cubic meters of lumber, 22,500 cubic meters of rock and gravel, and 1,700 cubic meters of sand! A kilometer of such a highway costs one and a half to 2 million rubles! It is true that the percentage share of category I highways comprises only a few percent of the road system of any country, although these roads handle -- bear this in mind -- from 60 to 75 percent of the total nonurban motor transport freight traffic. Most roads are modest roads of categories III and IV. They cost much less: from 100 to 300 thousand rubles per kilometer. But the design principles are the same. I am telling you all this in such detail so that you will more clearly understand our problems.

#### [Question] What problems?

[Answer] Well, for example, problems connected with logistic support for road building... Here is just one example: asphaltic bitumen. Asphalt is made of it. In order to maintain existing roads and build new ones, we must additionally produce approximately 2 million tons of asphaltic bitumen -- some fraction of a percent of the total quantity of oil produced by this country. Incidentally, science has calculated that because of poor roads we overconsume each year 6.5 million tons of gasoline and diesel fuel. It would seem a straighforward calculation to use this fraction of a percent of petroleum production for asphaltic bitumen and subsequently save that amount many times over on consumption of motor fuel. The savings will be even greater if we consider that asphalt is needed not only for new roads but to an even greater extent for old roads in service....

#### [Question] What do you mean?

[Answer] A road ages. It is a living organism, which requires prompt and time-ly treatment; in any case, every road needs regular maintenance, and restoration of worn surface. Motor transport traffic is growing. Year by year this traffic contains increasing numbers of heavy vehicles. Traffic continues all year, including winter. Naturally roads are wearing out faster and faster. And to say the last word about asphalt, I shall state that road builders have proceeded to make asphalt themselves. But the problem is that there is a

shortage of raw materials, so-called polugudron [a crude residue from petroleum refining]. I would like to draw the attention of USSR Gosplan, the Ministry of Petroleum Refining and Petrochemical Industry, as well as other agencies involved in the asphalt problem to this fact.

[Question] We know that for 25 years now we have been building a large part of this country's roads (I am speaking of local roads) with so-called "local resources." Put in simpler terms, organizations and enterprises allocate equipment, crushed rock, trucks, and workers for construction of new roads. Is this a good or bad thing -- to build roads primarily with local resources?

[Answer] It is neither "good" nor "bad." It is simply necessary. But can we concentrate all these scattered moderate resources in big construction organizations needed for building today's highway? Of course not. That is one of the reasons why construction of main highways is proceeding so slowly. I believe that it is high time to supplement the practice of "local" construction with large centralized capital spending and to provide materials and equipment for construction and maintenance of national and republic main highways, which comprise the backbone of this country's highway system. It is no less important properly to maintain existing roads and to learn a thrifty attitude toward this national asset which is worth many billions of rubles. It is a surprising fact, but this country does not yet have a GOST [State Standard] on vehicle weight. And sometimes designers design bodies the weight of which is too much for bridges and roads, especially those built 30 years ago. Apparently machine builders and truckers reason as follows: the road can take anything .... But what if it can't? That's all right, we'll use a cross-country vehicle. that doesn't work, fine, we'll replace it with an Uragan -- you know, a huge truck, with wheels the height of a man, charging down the road -- smashing it into dust and crushing bridges .... As you see, the "ROAD PROBLEM" REQUIRES IN PARTICULAR CHANGES IN THE PSYCHOLOGY OF THOSE WHO USE THE ROADS [in boldface]. We must put an end to the purely user-selfish, sometimes barbaric attitude toward roads.

[Question] How are things as regards mechanization of road construction and maintenance?

[Answer] Not so good. The main reason for this is the inadequate production facilities of Minstroydormash [Ministry of Construction, Road, and Municipal Machine Building] and a lack of basic motorized equipment of suitable horse-power. They have been "refining" the Cheboksary industrial tractor for 15 years now. For this reason the makers of road construction equipment must make do with low-powered purely agricultural-type tractors. Unfortunately we are getting none of the popular T-130 tractors (Cheboksary Tractor Plant). The situation is even worse as regards available road repair and maintenance equipment. Equipment based on Unimog self-propelled chassis has proven effective, but we do not manufacture such equipment: there is no Soviet-built base vehicle. We can only ask the Ministry of Automotive Industry to get such vehicles into production as quickly as possible, and Minstroydormash to give us sets of detachable equipment for seasonal road maintenance and repairs. This would save tens of thousands of road maintenance workers from dirty and heavy physical labor repairing and maintaining roads.

[Question] I would like to ask a question which apparently I should have asked first: what is the "road strategy" of Minavtodor [Ministry of Highways] at the present stage of our economic development?

[Answer] It consists of three main areas of emphasis. First of all, we need to make every effort to speed up construction of a basic highway network — I am talking about main highways linking into an integral economic whole the union republics, economic regions, and this country's major industrial and cultural centers. Second — we must complete as quickly as possible the linking of all rural rayon seats with the corresponding administrative seats of oblasts, krays, and autonomous republics, and we must link farms' central villages with rayon seats. Third, and no less important — road repair and maintenance. Repair and maintenance of roads are assuming increasingly more importance.

[Question] Are you satisfied with the pace of construction of new roads?

[Answer] Of course not. We can build both faster and more. Although we are not really building so little. Especially in recent years. Last year, for example, this country's road builders constructed approximately 16,000 kilometers of new roads. In the RSFSR we built almost 10,000 kilometers, that is, almost two thirds of the national total. Why has such emphasis been placed on Russia? BECAUSE THE PROBLEM OF ELIMINATING LACK OF ROADS AND BAD ROADS IN THIS COUNTRY IS FIRST AND FOREMOST A PROBLEM OF ELIMINATING THIS CONDITION IN THE RUSSIAN FEDERATION [in boldface]. In nine union republics we can consider that the road network is now established — all kolkhozes and all rayon seats there are linked by an integral network of roads.

[Question] Where in your opinion is the road problem being solved most successfully?

[Answer] In Estonia, Latvia, Moldavia, Kirghizia, and Tajikistan. In these republics there is not a single sovkhoz or sovkhoz which is not linked by hard-surface road to its rayon seat. These republics are building a network of precisely those "capillaries" that provide economic, social, and psychological contact between city and village.

[Question] How are things going with road construction in the Non-Chernoz-

[Answer] Pretty well on the whole. The pace of construction is in line with targets and is even significantly surpassing them. Targets have also been overfulfilled for the first two years of the five-year plan. Some oblasts and republics, however, have failed to meet these targets. A poorer job of building roads than their neighbors is being done in Arkhangelsk and Kirov oblasts, in the Karelian and Komi ASSR.... Roads and adequate services and amenities for villages and hamlets is the most important thing today for the Non-Chernozem zone. They need asphalt or concrete, and they need proper drainage. We in the ministry believe that it is high time to redirect part of the funds and resources being allocated for village development to construction of good roads, particularly to rural rayon seats and from rayon seats to farm central villages. And of course it would be necessary to provide services and amenities to villages and hamlets "along the way." Only after this does it make sense to

build on-farm roads. In the Non-Chernozem zone 60 remote rural rayons are still not linked to their oblast seats, while 1,800 kolkhoz and sovkhoz central villages have no line of communication "with their own" rayon seat other than hard-to-travel, ancient unpaved roads. But without new roads we shall not obtain those results we expect from land improvement, from livestock raising complexes, and from providing villages with modern apartment houses and social-cultural-service facilities! It will be necessary to build approximately 90,000 kilometers of roads in the Russian Federation in order to link all remaining kolkhozes and sovkhozes — and there are 6,000 of these — with rayon seats, and approximately 170 rayon seats with the oblast or kray seats and the republic capital. Nor should we forget that many roads and bridges built since the war now need renovation and upgrading.

[Question] How many years will this enormous work take?

[Answer] Enormous? It is first and foremost a job of enormous importance. Its significance is not only purely economic but sociopolitical and psychological to an equal if not greater degree, about which Yuriy Vladimirovich Andropov reminded the entire country in his speech devoted to the 60th anniversary of establishment of the USSR. And as for timetable, I believe it is an entirely realistic goal to accomplish this task by the year 2000.

[Question] It sounds like you are about to add: "Of course under the condition that...."

[Answer] Yes, precisely: under the condition that everybody who in one way or another is connected with solving the road problems will unswervingly act in the spirit of the well-known party and government decree on measures to improve road construction and maintenance. For us road builders this decree is a fighting program for the 1980's. And it is primarily thanks to this most important document that we have recently begun building more roads and have improved their quality.

[Question] Then may I ask what is hindering faster resolution of the road problems? Is it that roads are costly?

[Answer] But absence of roads is even more costly. Incidentally, are you familiar with the figures on the detriment done to us by a lack of roads? Jot this down: transportation amounts to 40 percent of the cost of agricultural products, but frequently the cost of delivering them is greater than what is earned from selling them. Every truck in the Russian Federation stands idle almost 2 months each year due to impassable roads. Truck productivity on dirt roads, even during the summer dry season, is half that achieved on an asphalt highway. Six out of every 10 kolkhoz and sovkhoz tractors are busy during the muddy road season hauling goods or pulling stuck vehicles out of the mud. But these are all direct losses. There are also indirect losses: the harvest is smaller because of bad roads -- fertilizer is not applied when it should be and proper farming techniques are not observed; crops become coated with dust; trucks drive right across fields; the crop is not always hauled from the fields in a prompt and timely manner. Add to this the production losses caused by hauling on northern roads. It has been calculated that farms lose up to two rubles per quintal of milk and as much as 3 rubles per quintal of vegetables just due to grade reduction on produce hauled on bad roads. If you add up all

these losses, they will total many billions of rubles.... Unfortunately the force of inertia and planning from the achieved level turn out to be stronger than the arguments of statistics and the calculations of scientists. But roads mean not only savings. As we know, they mean a totally different standard of living in the village. On farms well served by roads labor turnover is one third less than on "roadless" farms! Naturally the road construction program costs a lot of money. But we must find this money within the framework of specified capital spending on the nation's economy, drawing up targets for the coming five-year plans.

[Question] How?

[Answer] First of all we should, as I have already mentioned, redistribute in favor of road building part of the funds allocated for development of agriculture. Such a redistribution will unquestionably result in more efficient development of agricultural production proper. With the same acreage, with the same crop yields as today, we can increase end agricultural output yield by a minimum of 8-9 percent.

[Question] What Russian oblasts would you say are successfully improving their road network?

[Answer] Many of them. For example, recently Saratov Oblast was one of the "ones you can't drive through." And today? All rayons, including the most remote, along the border of Kazakhstan, are linked by asphalt; the people of Saratov Oblast have built 4,600 kilometers of roads! They have done a fine job! And do you know what their secret is? It is very simple: the entire oblast got together and set about the job, and the campaign was headed by a man of energy and initiative -- Konstantin Platonovich Murenin, secretary of the oblast party committee. Noliy Petrovich Samoteyev, head of the Saratov road builders, is also distinguished by a high degree of industriousness and love of roadbuilding....

[Question] Are you not contradicting yourself? On the one hand we need asphalt, gravel, sand, and equipment, while on the other hand you say the entire secret lies in enthusiasm?

[Answer] That is right: the people of Saratov scouted out their own local stone quarries and, with the assistance of big construction and industrial enterprises situated in the oblast provided them with equipment, quadrupling production of gravel and crushed rock. Utilizing the construction base at the Balakovo Power Station, they fabricated the structures of future bridges and reinforced concrete culverts. In short, useful initiative was displayed. Road construction was declared to be an oblast Komsomol shock-work project. The oblast party committee kept a constant watch on it. One important detail: the "Udar" [blow; play on words with udarnyy -- shock-work] was applied by powerful "fists," assembling all manpower and resources on one or two spreads....

[Question] Tell me, Aleksey Aleksandrovich, how many roads do we have to build in order to be able to say that we have brought an end to the no-road, bad-road situation?

[Answer] I can only give you an approximate, rough figure; anyway, there can be no precise "final" figure. In the Russian Federation it would be approximately 450,000 kilometers, and probably 600,000 kilometers for the entire country.

[Question] And how much time will this program take?

[Answer] I cannot answer that question. It depends on a number of factors which we cannot figure in at this time, because they simply are not forecastable. Therefore we shall proceed in our calculations from the following premise: WITH ADEQUATE LOGISTIC SUPPORT, WE COULD DOUBLE THE RATE OF ROAD CONSTRUCTION AND REPAIR AND BRING INTO SERVICE EACH YEAR 30,000 KILOMETERS OF NEW ROADS [in boldface].

[Question] By "logistic support" do you mean primarily asphalt? As I understand it, however, there are knowledgeable people both at Gosplan and Gossnab, and since they put you on a certain asphalt ration year after year, they cannot come up with any more....

[Answer] We stated above that it is not only a matter of asphalt. Asphalt is the most important item, because the situation gets more difficult each year, and this is fraught with serious consequences. But other problems must also be resolved in addition to asphalt, both involving supply (cement, metal, timber) and equipment (heavy earth-moving equipment, trucks, special vehicles and other equipment). Of course if we proceed from the traditional, established "nutrition standards" for road builders, Gosplan and Gossnab cannot resolve these problems. But we are talking about HOW THE PROBLEM SHOULD BE MORE QUICKLY SOLVED [in boldface]. In this case there can be only one solution: WE MUST REVISE THE BASIC PROPORTIONS IN FUTURE ECONOMIC PLANS IN FAVOR OF ROADS [in boldface]. I do not believe that in this case anyone will accuse me of a narrow parochial approach, FOR ROAD CONSTRUCTION IS TRULY A PRIORITY BRANCH [in boldface]. In the sense that without it it is impossible to achieve growth and development of any other branch or sector of the economy, and especially the agroindustrial complex. Therefore roads must be given priority. And if we request asphalt or something else, we should receive priority in allocation. And machinery as well. This will be subsequently repaid a hundred times over. In my opinion this should be a guiding principle in planning practice. Thirty years ago we were capable of building the Moscow-Kharkov-Simferepol highway, stretching about 1,400 kilometers, a highway which was pretty good for those times, in a period of 20 calendar months. But today there are no road building organizations in this country capable of performing a similar job in the same period of time, although on the whole we have begun building 10 times as many roads! Why is this? Because the majority of road construction organizations are rigidly bound to local, not mobile resources. Centralized capital spending, material and technical resources, a highly-developed production base, and participation by a number of heavy industry branches in road construction are needed in order to establish sufficiently powerful, mobile organizations. Organization of construction of main rail lines can serve as a model. Highways are no simpler, no easier, and no cheaper. We must put an end to the practice of building roads chiefly with above-target capital spending. Everything should be rigorously planned and bolstered by suitable funds.

[Question] You have named a number of factors hindering rapid solving of the road problem. A conclusion suggests itself: an aggregate of the most diversified measures is necessary in order more rapidly to overcome the bad-road, no-road problem. A combined program is needed which would integrate the efforts of the various agencies and focus them on a single task — road construction and repair. It would specify to each partner organization what it is to do, when and how. Right?

[Answer] Yes. Of course a combined program is needed. We are for such a program. And such a program is already being formulated for the RSFSR. It will be considered by the RSFSR Council of Ministers. But I have already stated that we are constantly guided in our work by that aggressive program for 1981-1985 and the period up to 1990 which was specified by the CPSU Central Committee and USSR Council of Ministers decree entitled "On Measures to Improve Construction, Repair, and Maintenance of This Country's Roads." And we believe that the main thing today — forgive me for constantly repeating this — is for each and every provision and point in this document to be rigorously implemented by everyone specified in it.

[Question] In that case I shall also repeat the question with which we began the interview. I repeat, to summarize: what must be done to solve the road problem?

[Answer] What must be done? We must work indefatigably. All of us. Stubborn-ly. Persistently, without yielding to "dejection and indolence." I see no other way.

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CSO: 1829/281

# MOTOR VEHICLES AND HIGHWAYS

# GOSPLAN OFFICIAL URGES MORE CENTRALIZED TRUCKING ACTIVITIES

Moscow IZVESTIYA in Russian 8 Jun 83 p 2

[Article by V. Karpunenkov, deputy chief of USSR Gosplan Transportation Department: "Truck En Route: More Aggressively Developing Centralized Hauling Operations"]

[Text] Today even nonspecialists know what centralized motor transport hauling is. This method consists essentially in all freight being delivered to consignees, on timetables specified by contractual agreement, by a single common-carrier motor transport organization. This frees clients from the chores of doing the paperwork, forwarding and hauling goods. According to the experience of Glavmosavtotrans, for more than 30 years now truckers in all union republics have been employing this method.

Adoption of centralized freight delivery enables common-carrier motor trucking organizations to boost labor productivity, to speed up the delivery of goods, to improve truck utilization, to reduce transport costs, and to obtain considerable savings in labor and material resources.

And, what is particularly important, conditions are created for eliminating phony claims on uncompleted volume of work and abuses in consumption of fuel and lubricants in motor transport, and extensive mechanization of freight handling operations is ensured, with maximum efficient employment of trucks. Growth of centralized hauling forms a basis for eliminating small-scale ministerial trucking operations and speeds up the process of consolidating common-carrier motor transport enterprises.

This is so... but today even in Moscow, where the basic principles of centralized freight hauling were first elaborated, "self-hauling" by agency manpower and resources is still operating in full swing. For example, with total hauling requests for 2.23 million tons of brick in 1982, only 1.3 million tons were handed over to common-carrier trucking. "Self-hauling" is flourishing in the delivery of paper, metal, cement, etc. And once again there are long lines of trucks standing at loading terminals, and small agency trucking operations are established.

An even more unfavorable situation is developing in intercity hauls. They are performed by all ministries and agencies -- without coordination and without

appropriate oversight. Repeat checks on the roads entering Moscow and other major cities have shown that intercity hauls are being performed by ministries and agencies as a rule in trailerless trucks of all sizes (averaging 4-4.5 tons), with one-way loads. And yet the number of empty trucks running to and from Moscow is approximately equal.

On the average a million trucks are hauling goods on intercity routes each year. If this hauling were transferred over to common-carrier transport, and if it were performed with 20-ton truck-and-trailer rigs, it would eliminate 600-650 thousand trucks and their drivers. Labor productivity per vehicle would triple to quadruple.

Transfer of trucks from small trucking operations to operations with more than 50 trucks would make it possible to increase vehicle productivity by a factor of 1.7, to reduce trucking costs by 26.5 percent, to eliminate the need for approximately 800,000 trucks, to reduce driver requirements by about 860,000 persons, and to reduce transport costs by approximately 2.2 billion rubles per year. This can substantially reduce requirements in trucks and generate enormous savings in consumption of fuel and lubricants.

We believe that at the present stage of development of this country's productive resources, both forms of employment of motor transport should exist, with preferential growth of common-carrier motor trucking. Centralized hauling, both in local and intercity operations, should be concentrated in common-carrier motor trucking operations, while agency transport should handle hauling operations within plants and within contruction sites.

Magadan Oblast is a typical example. The main hauler in this oblast is the USSR Ministry of Nonferrous Metallurgy. Handling all the basic hauling operations for an extended period of time, this ministry's motor transport has been unable fully to meet the hauling needs of the entire oblast. As a result the USSR Ministry of Construction in the Far East and Transbaikal Regions, USSR Gossnab, the USSR Ministry of Power and Electrification, the USSR Ministry of Coal Industry, and others have established their own motor trucking operations here. This has failed to solve the problem, however.

How should we proceed in such cases?

First of all it is necessary to draw up a transport balance sheet for hauling within the oblast — with determination of hauling requirements, in comparison with hauling capabilities (independently of truck fleet ministerial jurisdiction). It is also necessary to improve utilization of transport and to reduce the gap in truck productivity. Responsibility and a coordinating role under these conditions must be assigned to common-carrier trucking, with ministerial motor transport utilized on certain hauls, in conformity with the adopted transport balance sheet.

Evaluating the present state of motor transport in this country, one can conclude that it has experienced considerable development and is now performing enormous tasks in hauling freight and passengers. Each year motor transport handles approximately 82 percent of hauls, in terms of tonnage, of the total

volume performed by all modes of transportation. But due to the lack of unity in operations and absence of proper oversight and coordination, our country is forced to spend enormous amounts of money on maintaining and operating motor transport.

The present system of management of this country's common-carrier motor transport requires the establishment of a unified agency to administer and manage it.

Additional measures to shift volumes of centralized freight hauling in intracity and intracity service to common-carrier motor transport, with a sharp curtailment of small trucking operations, can realistically be accomplished in a span of 3-5 years. This naturally will require appropriate allocation of trucks to common-carrier motor transport. The sooner this is done, the sooner the enormous reserve potential existing in motor transport will be placed in the service of our nation's economy.

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CSO: 1829/282

# MOTOR VEHICLES AND HIGHWAYS

BASIC FEATURES OF NEW MODEL ZIL-4104 LIMOUSINE

Moscow ZA RULEM in Russian No 4, Apr 83 p 8

[Article by Ye. Gusev, deputy chief designer in the Automobile Plant imeni 1. A. Kikhachev: "An Automobile of the Highest Class"]

[Text] Reliability, technical perfection, comfort, an elegant and impressive exterior -- these are the traditional features of the highest class car models produced by the Moscow plant imeni I. A. Likhachev (the "Zil" Production Association). They have been embodied at a high modern level in our latest model -- the ZIL-4104 which has replaced the ZIL-114.



There is quite a bit in common in the external appearance and construction of these automobiles. The new one is notable for its more modern technical and styling designs of the main units and assemblies, which reflect the progress that has been achieved by our native and world automobile builders during the last 15 years.

Thanks to the shortening of the trunk and to a certain lengthening of the automobile's hood, it was possible to give a more dynamic appearance to the new machine with practically the same size. New bumpers that extend far around the side of the chassis, oblong-shaped side lights and turn indicators, and thin chrome moldings on the sides contribute to this. The radiator's facing, which extends forward somewhat, has made the vehicle's silhouette even more expressive. The chrome strips around the wheel wells combined with the decorative hub caps give the automobile a special elegance.

The V-shaped 8-cylinder engine (the included angle of the cylinders is 90 degrees) insures the high maximum speed and dynamics of the new model. In the ZIL-4104, its power has grown to 315 horsepower/232 kilowatts (the ZIL-114 had 300 horsepower/221 kilowatts). The increase was basically obtained by increasing the working volume from 6.96 to 7.68 liters; the piston movement increased from 95 to 105 millimeters. An important feature of the new engine is the camshafts located in the cylinder heads. These have permitted the operation of the valve mechanism to be improved. The cams operate on the valves through the single arm of a lever. One end of the lever rests on a valve and the second -- on a hydraulic stop which serves to automatically compensate for thermal expansion; according to its operating principle, it is identical to a hydraulic pusher. The driving of the shafts is accomplished by a double rowed roller chain. It is more compact and less noisy than the earlier design.

The cylinder block and heads are made of an aluminum alloy. "Wet" cast-iron sleeves with a lower resting collar have been pressed into the block. The combustion chambers are semi-wedged shaped; the piston crown has a bulge (a displacer). This design insures high antiknock properties. There are three compression and one oiling ring in the piston head.

Two radiators are used to cool the oil rapidly. One, a liquid one, is built into the cylinder block and is included in sequence in the lubrication system with a filter. It is used not only for cooling but also for warming up during starting. The second one, which is cooled by air, is included in parallel.

The contact transistor ignition system has two circuits -- the main one and an emergency one.

The automatic transmission -- a torque convertor and a planetary gear box-insures the smooth starting and acceleration of the vehicle.

The service brakes have ventilated discs. Their operation with two independent circuits, each of which operates on the brakes of all wheels, guarantees

their increased reliability. The parking brakes are drum-type and are mounted in the rear wheels. Their mechanical operation is achieved by pressing on a special pedal; their release takes place either automatically when the motor begins to operate and any of the gears is engaged or when the driver presses a key on the instrument panel.

Resilient elements in the shape of torsion bars located along the vehicle are a distinctive feature of the front suspension. The axes of its upper and lower levers are not parallel. This placement precludes the "pecking" of the chassis when braking. The rear axle is suspended on semi-elliptical springs, and two torque rods take the pushing and braking forces.

The steering mechanism is structurally connected with a hydraulic booster. Its arrangement is similar to that used in other ZIL automobiles.

The grouping and equipment of the chassis satisfy all the requirements which have been imposed on automobiles of the highest class. A partition with a movable glass divides the interior into two compartments -- the driver compartment and the passenger compartment -- with independent systems for heating, ventilation and cooling of the air.

A stereophonic radio receiver and a tape deck with six speakers, electrically operated windows, mechanisms for moving the front and rear seats, a device for locking the locks on all doors from the driver's position, and inertial safety belts for the front and rear seats are included in the equipment of the chassis. The position of the side-view mirror can be changed from inside the car. The headlights are equipped with brush cleaners and washers.

"Convertible" (ZIL-41044) and "universal" (ZIL-41042) modifications to the body are being created using the ZIL-4104 model.

Technical Characteristics of the ZIL-4104 Automobile

General Data: number of seats -- 7; number of doors--4; speed (with driver and passenger) -- 190 kilometers per hour; acceleration time from a halt to 100 kilometers per hour (with driver and passenger) -- 13.0 seconds; planned expenditure of fuel at a speed of 80 kilometers per hour -- 22 liters per 100 kilometers; fuel capacity -- 120 liters. Dimensions: length --6,339 millimeters; width -- 2,086 millimeters; height -- 1,500 millimeters; base -- 3,880 millimeters; wheel gauge: front -- 1,643 millimeters, rear--1,663 millimeters; road clearance -- 154 millimeters; tire size -- 9.35-15 (235-380). Engine: type -- V-shaped; number of cylinders -- 8; cylinder diameter -- 108 millimeters; piston travel -- 105 millimeters; operating volume -- 7,680 cubic centimeters; compression ratio -- 9.3; power -- 315 horsepower/232 kilowatts at 4,600 revolutions per minute; maximum torque --62 kilograms of force ·m/608 N·m at 4,000 -4,600 revolutions per minute; carburetor -- K-259, four barrel; fuel -- AI-95 "Extra" gasoline. Transtorque convertor and a three-step planetary gear box; main mission: transmission -- conic, hypoid.

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# MOTOR VEHICLES AND HIGHWAYS

# BRIEFS

TAJIK SSR FUEL SALES--The Tajik SSR Goskomnefteprodukt [State Committee for the Supply of Petroleum Products] is notifying all owners of personal motor vehicles that beginning 1 April in the cities of Dushanbe and Leninabad the sale of fuel and lubricants for refueling motor vehicles will be made only for cash at specially equipped vehicle refueling stations. The indicated stations are AZS [vehicle refueling station] number 2 on "Pravda" Prospekt in Dushanbe and the newly constructed AZS number 56 in a 20-meter block of Leninabad. The sale of fuel and lubricants for market fund coupons will continue at the republic's remaining AZS's except AZS number 2 in Dushanbe and AZS number 56 in Leninabad. [Text] [Dushanbe KOMMUNIST TADZHIKISTANA in Russian 20 Mar 83 p 4] 9889

BENZO-METHANOL FUEL MIXTURE--Voroshilovgrad. Vehicles with an unusual sign on the side--the letter "M" in a yellow square--have appeared on the streets of Voroshilovgrad. This means that a benzo-methanol mixture instead of pure gasoline is being burned in their engines. Voroshilovgrad scientists and specialists from Severodonetsk developed the technology for producing heavy diesel fuel by adding methyl alcohol. The mixture works in an engine even at a temperature of minus 47 degrees. The composite fuel is being tested now under various climatic conditions. As the first results showed, its use did not degrade vehicle performance. In this case, exhaust toxicity was one-third as much and, above all, up to 20 percent of the gasoline is saved. [Text]
[Moscow SOTSIALISTICHESKAYA INDUSTRIYA in Russian 22 Mar 83 p 2] 9889

NEW CROSS-COUNTRY MICROBUS--Kuybyshev. The vehicle repair plant of the "Kuybyshevsel'khozremont" industrial association is producing comfortable microbuses on the wheelbase of the "GAZ-53" vehicle. They are simple to operate and have good road performance. The enterprise is now preparing for the production of a new rural bus which is called "Volgar'." It was created together with specialists of the All-Union Experimental-Design Institute for Bus Building in the city of L'vov. The novelty is undergoing production tests. The comfortable "Volgar'" is intended for transporting 21 passengers and has improved road performance. [By A. Vorob'yev] [Text] [Moscow SOTSIALISTICHES-KAYA INDUSTRIYA in Russian 23 Mar 83 p 2] 9889

MOLDS FOR RADIAL TIRES--Artem. The Artem plant in Maritime Kray mastered the repair of radial tires. Here they turned to the progressive technology of renovating this vehicle "footwear." The country's industry mastered the

production of vehicle tires with a radially structured metal cord. But when casings of that kind began to reach the plant, it was found that new production-process lines were necessary for restoring them. They were able to cope with a task of that kind at the enterprise by themselves. The innovators made compression molds, special devices, and equipment for repairing the new model tires. [Text] [Moscow GUDOK in Russian 1 Apr 83 p 1] 9889

TRACTOR SHIPMENTS ABOVE PLAN--The tractor freight yard. The workers of this yard and transportation shop of the tractor plant are confidently meeting the high socialist commitments which they made jointly for 1983. In January and February alone they shipped more than 850 brand-new agricultural machines in excess of the plan to various regions of the country. Moreover, local railroad car demurrage was reduced by 3.3 hours in comparison with the standard. Here today the shipping of agricultural equipment is proceeding at a high rate. Receipt-delivery clerks M. Utina and A. Pustovalova, freight cashier Z. Nikitina, and yardmaster I. Dundukov work in close business contact with subcontractors. The problem of providing the plant with empty railroad cars is being resolved successfully. They took a portion of them from their own unloading and the Volgograd department of the Privolzhskiy yard sent the rest to the enterprise's spur lines. Another reserve is also used continually at the plant: after the example of the Muscovites the repair of railroad rolling stock is efficiently set into motion here. All this taken together made it possible today for the shift, which is headed by the assistant yardmaster L. Shutrova, with a plan of 55 to ship 71 flatcars with equipment. In the course of a year, no less than 1,000 flatcars with tractors, in addition to the planned target, will be dispatched from the plant. [Text] [Moscow GUDOK in Russian 3 Apr 83 p 1] 9889

AVAILABILITY OF AUTOMOBILE BATTERIES--Baku. G. Ageyev asks: "What happened to the output and sale of automobile batteries? About two or three years ago one could buy them in a store. Now you can't find them in the daytime with a light." Deputy Chief of Glavkul'tbyttorg [Main Administration for Cultural, Consumer, Household and Haberdashery Goods Trade] of the USSR Ministry of Trade P. Kapitonov replies: "Since 1982 the sale of lead-acid batteries has been in effect for citizen owners of vehicles through enterprises for automobile maintenance subordinate to the Ministry of the Automotive Industry or 'Avtotekhobsluzhivaniye' republic enterprises (departments) provided used batteries are surrendered; and through indicated enterprises and the parcel trade system of the Ukranian SSR and RSFSR ministries of trade, without surrendering used batteries, to invalids owning 'Moskvich' or 'Zaporezhets' automobiles, or motor-cycles with sidecars." [Text] [Moscow SOTSIALISTICHESKAYA INDUSTRIYA in Russian 20 Apr 83 p 4] 9889

VEHICLES ON COMPRESSED GAS--Kazan . Planners began developing drafts of the first gas compressor stations in Tatariya which will fill the tanks of motor vehicle transportation with the blue fuel. The station areas lead out along the popular main highways. Each of them will be able to provide 500 vehicles per day with fuel. The first motor vehicles operating on gas appeared in the republic 10 years ago. A column of trucks with compressed gas bottles instead of the traditional gasoline tanks is operating at the "Srednevolzhskgaz" enterprise. New gas compressor stations for motor vehicles with compressed gas

bottles will be constructed in the cities of Brezhnev, Nizhnekamsk, Al'met'yevsk, Yelabuga, Zelenodol'sk, and Chistopol'. [By M. Zaripov] [Text] [Moscow SOVETSKAYA ROSSIYA in Russian 22 May 83 p 1] 9889

DUMP TRAILERS FOR CONSTRUCTION--This year the Kirovakan Experimental Vehicle Repair Plant manufactured and shipped to motor vehicle transportation enterprises more than 60 single-axle dump trailers for KrAZ [Kremenchug Automotive Plant] and ZIL [Automotive Plant imeni Likhachev] motor vehicles. Equipped with an inertial tipping mechanism, the 7-ton and 4.5-ton capacity trailers are noted for high operating characteristics--maneuverability and road performance. Under rigorous operation, test results confirmed the design prospects of the trailers. The use of trailers is particularly effective for transporting large quantities of granulated construction materials during the erection of units at agricultural complexes. [By V. Adamyants] [Text] [Yerevan KOMMUNIST in Russian 16 Jun 83 p 4] 9889

CSO: 1829/280

RAIL SYSTEMS

RAILWAYS MINISTRY DEFINES CURRENT TASKS, BASIC DIRECTIONS

Moscow GUDOK in Russian 23 Jul 83 pp 1-2

[Article: "Strategic Tasks for the Second Half of the Five-Year Plan"]

[Text] As was already reported in GUDOK, an expanded meeting of the Ministry of Railways board was held a few days ago, attended by the heads of railroads and divisions. A speech entitled "On Measures to Achieve a Further Upswing in the Performance of Rail Transportation in Light of the Decisions of June CPSU Central Committee Plenum" was presented by Minister of Railways N. S. Konarev.

The chief executive officers and chief engineers of the rail-roads visited the All-Union Scientific Research Institute for Rail Transport, heard scientist reports on the principal areas and directions of technological advance, and discussed with them many problems of concern to operations people. At the institute's test track railroad officials became acquainted with the latest-model locomotives, cars, track and roadbed equipment, as well as other vehicles, viewing them in action, and communicated their wishes and desires to the scientists and design engineers.

Today we shall discuss the principal areas and directions of production and management activity of this branch, examined at the expanded meeting of the board, as well as the program of concrete actions for the second half of this year and running up to the end of the 11th Five-Year Plan, as specified at the meeting.

Commander -- Organizer and Indoctrinator

The minister stated that the June CPSU Central Committee Plenum examined current problems of ideological and mass-political work. It constituted a major, important event in our lives. CPSU Central Committee General Secretary Comrade Yu. V. Andropov persuasively presented in his speech at the Plenum the paramount importance of developing conscientious, convinced campaigners for the cause of the party and people. He deeply analyzed the present level of productive

resources and production relations of developed socialism and substantiated the determining directional thrusts of party and government tactics and strategy.

The decisions of the June CPSU Central Committee Plenum and the tasks specified at the Plenum have evoked a lively, enthusiastic response in the hearts of Soviet citizens and have become for them a fighting program of action. Transportation management officials, together with party, trade union and Komsomol organizations, are obliged to raise all ideological and indoctrination work to a new and higher level and to boost its effectiveness and results. The principal ways, directions, forms and methods of this work are clearly delineated in Comrade Yu. V. Andropov's speech and in the Plenum decree. There is no place and can be no place for formalism and predictable routine in indoctrination work; timidity and laziness of thinking are intolerable.

The CPSU Central Committee Plenum decree stresses: "It is essential consistently to construct ideological indoctrination work on the firm foundation of party socioeconomic policy. It should be filled with profound ideas, which are closely linked with today's realities and which point the way toward further advance." There is opened up here a very broad area of activity for commanders of transportation, from brigade leader to railroad chief executive officer and minister.

We must work resolutely to correct those officials who attempt to avoid painstaking indoctrination work and to place it entirely on the shoulders of the people in personnel, party and trade union organizations.

The commander's main concern is work with people, for it is people who determine the success of any undertaking. It is very important to improve the work style and methods of the management edifice. One still encounters incompetence and an armchair work style. Some commanders' notion of the work at hand is based on obsolete concepts and knowledge acquired long ago, while life has advanced far ahead, the situation has changed, and knowledge has become outdated. Such miserable officials sometimes make decisions which are totally inappropriate. It is necessary constantly to keep a hand on the pulse of life, to possess good knowledge of development trends in the operation directly under one's management, of the entire railroad industry, and to manage operations skillfully and efficiently, with a profound and thorough knowledge of one's job.

Commanders of transportation, and particularly high officials, should display a personal example of discipline, responsibility, and a national-interest approach to the assigned job in order for all railroaders to emulate them. It is necessary to make every effort to boost the prestige of the commanders, giving them the most extensive opportunities for bold, independent actions, to display initiative and enterprise. A commander's independence, decisiveness, boldness, and the courage to make decisions on matters within his jurisdiction are very important traits of today's commander. And their practical manifestation should be fully supported and encouraged, creating the most favorable conditions for this.

Many commanders have not yet learned to evaluate production activity through the prism of economics and have failed to master modern methods of economic analysis. And yet economics thinking is simply essential in order to achieve high quantitative and particularly qualitative performance results.

Special attention at the CPSU Central Committee Plenum was focused on selection of command cadres and indoctrinator cadres. And a great many errors must be corrected in this area in the transportation industry. It sometimes happens that an official is unprepared to work with people, does a bad job, and is transferred, placed in charge of another section, where he once again proves incompetent. Some commanders make big promises but fail to keep them, finding thousands of reasons and excuses to justify their inactivity and lack of responsibility, and displaying timidity where they should be showing initiative and aggressiveness.

Such practices and such an attitude toward one's job must be rooted out most resolutely. Selection of supervisory and executive personnel should be substantially improved, the minister stressed. In our daily practical activities it is essential to take into consideration all new things dictated by the Law on Workforces and Enhancing Their Role in Management of Enterprises, Establishments, and Organizations promulgated at the 8th Session of the USSR Supreme Soviet.

Critically Analyze Work and Swiftly Correct Deficiencies

At the November (1982) CPSU Central Committee Plenum, the activities of the Ministry of Railways were subjected to harsh criticism. As we know, at an expanded meeting on 13 December of last year the Ministry of Railways board self-critically examined the state of affairs, brought to light the causes of unsatisfactory work performance, and defined tactics and strategy to achieve a sharp upsurge in all rail transportation activites. Particular attention was focused on radical improvement of work style and methods. What action decisions were made?

First of all, it was decided radically to alter the attitude toward the rail operations plan and to carry it out under any and all conditions, and to ensure that targets are achieved for the entire list of freight categories. This is task number one. And the activities of all commanders and specialists, regardless of what position they may hold, shall be examined and evaluated in the light of their participation in creating conditions for successful fulfillment of the rail operations plan. In short, all railroaders are responsible for the rail operations plan.

All-out attention is to be focused on improving the content and development of operations, with purposeful elimination of bottlenecks. At the same time it was necessary to shift from parasitical attitudes and from constant complaining about inadequate traffic capacity and shortage of equipment to realization of the great potential of the material and technical foundation of transportation and more efficient utilization of this potential. It was decided to counter these attitudes with a high degree of organization, knowledge, and painstaking work by railroaders.

To wage a purposeful campaign to improve every qualitative indicator in all branches of transportation. To achieve targeted performance levels first and foremost on the basis of reducing and eliminating losses occurring as a result of organizational and technological errors of omission, lack of discipline and slackness. Resolute strengthening of plan, operations, and labor discipline at all levels is the main condition for boosting the level of operations performance.

All necessary conditions must be created, and particularly an innovative environment for accelerating scientific and technological advance and for priority adoption of new equipment, advanced technology and know-how.

It was important to change attitude toward others, to increase demandingness, to have an implacable attitude toward abuses and violations, and at the same time rigorously to observe objectivity, to have a kindly attitude toward those who work conscientiously. It was necessary to arrange things so that commanders can devote the bulk of their time to practical organizational work.

Evaluating what has been accomplished by the board, officials of main administrations, railroads, divisions, and enterprises, as well as by all railroad workers since the November Plenum to reorganize rail transport operations, today, as N. S. Konarev noted, we can firmly state that the directions and areas in which efforts should be concentrated were correctly chosen.

Painstaking labor by the many workforces of transportation enterprises and their officials, who were able to perceive the meaning of the new demands and to carry out the necessary reorganization, merits strong recognition and high praise. It is to them, our outstanding workers, the minister stressed, that we owe the fact that since last November rail transportation has been consistently meeting planned targets and increasing volume of rail operations.

As was noted at a recent meeting of the USSR Council of Ministers, rail transport operations performance improved somewhat in January-June 1983; the freight hauling target was met 101.3 percent; 23.7 million tons of freight was hauled above target. Freight shipping increased by more than 62 million tons in comparison with the corresponding period of last year. The freight traffic target was overfulfilled by 27.2 billion ton-kilometers. Growth over the first half of last year amounted to 64.6 billion ton-kilometers or 3.7 percent. The passenger traffic target was overfulfilled by 4.4 percent. The target for a most important economic indicator -- labor productivity -- was surpassed by 1.7 percent. It increased by 3.8 percent over the corresponding period of last year. Cost of rail operations declined by 1.7 percent beyond target. Profitability increased. Above-target profit totaled 136 million rubles. Substantial savings in fuel and energy resources were achieved.

These are unquestionably gratifying figures. But performance is far from what is required. There still remain a great many unutilized possibilities and reserve potential. While giving due credit to what has been accomplished, to the selfless labor of thousands and thousands of railroaders, one cannot help but see that what has been accomplished is far from what was specified. There are still a great many deficiencies and errors of omission in performance at all levels, from the ministry to the immediate executing personnel. And what

has been accomplished must be critically evaluated, evaluated in light of the decisions of the June Plenum. And the Plenum clearly stated that it is essential to make up for transportation's fallbehind position.

Although the freight shipment target was overfulfilled, very large quantities of unshipped goods remain at enterprises of many branches and sectors of the economy -- coal, timber and pulpwood, plus much else. Six railroads -- the Transcaucasian (Comrade Vardosanidze, chief executive officer), the Kuybyshev (Comrade Chernov), the Southern Urals (Comrade Tarunin), the Kemerovo (Comrade Val'kov), the Donetsk (Comrade Kozhushko), and the Virgin Lands (Comrade Ovsyanik) have failed to meet the rail operations target, shortfalling by a total of 2 million tons, thus doing detriment to the economy. On the Donetsk and Virgin Lands railroads there was even a decline in operations volume below last year's level.

As was noted at a meeting of the board on 24 May of this year, there continue to remain a great many shortcomings in passenger service, and proper operating procedures are slow in being adopted at terminals and on trains.

The situation has remained virtually unchanged as regards departure and enroute movement of passanger trains, while their record for on-schedule arrival at the destination has even worsened somewhat. Not more than 65 percent of passenger trains run on schedule on the Central Asian (Comrade Kadyrov, chief executive officer) and Azerbaijan (Comrade Platonov) railroads. Train movement en route is being more poorly monitored. This is not the way to do things.

Freight targets by category are still being poorly met. Of 17 freight categories on the annual list, the target for the first six months was achieved only for 12. Railroaders failed to meet targets pertaining to shipping feed concentrates, fluxes, timber industry loads, refractories, and cement. The Kuybyshev, Western Siberian, Southern Urals, and certain other railroads are failing to haul the targeted volumes of petroleum-category loads. Shipping of timber industry loads failed to meet targets on the October, Gorkiy, Northern, Volga, Kuybyshev, Sverdlovsk, Krasnoyarsk, Eastern Siberian, and Far Eastern railroads. Those railroads which failed to meet targets on hauling other major freight categories were also named.

Losses are high, very high, as a consequence of an irregular flow of freight operations. Here too much depends on coordinating operations with the customer and on demandingness on customers. Calculations indicate that 900,000 cars were lost for loading due to a slowing of the work pace on days off and holidays in the first half of the year. And the discrepancy between the pace of loading operations on workdays and days off is showing an alarming tendency to increase. In 1981 it totaled 10,300 cars, 12,900 in 1982, and 13,300 in the first half of this year. We cannot further tolerate such wastefulness.

With a general overfulfillment of the freight traffic plan, the target was not fully met on the Volga, Western Kazakhstan, Virgin Lands, Odessa, Belorussian, and Southern railroads.

Average daily offloading increased by 6,400 cars over last year, but the specified target was underfulfilled by 3,100 cars. And more than 15,000 cars

were not off-loaded on turnaround. The worst job was done on the October, Far Eastern, Moldavian, and Baltic railroads. Off-loading even declined below last year's figure on the Southern Urals Railroad.

Railroad and division officials are not yet displaying sufficient demandingness on yard personnel and customers in order to achieve every possible speedup in unloading cars. In the first half of the year 25,700 cars each day were not unloaded in a prompt and timely manner. Of these, 14,500 were on industrial plant sites, and 11,200 were standing on sidings waiting to be taken. The moderate decrease in idle time on sidings is no cause for reassurance, since every day from 4 to 5 thousand cars are unavailable for loading due to delayed unloading. Work with local freight is still poorly organized.

Yes, some reduction in losses was achieved in the first half of the year. Utilization of line traffic capacity and yard handling capability was improved somewhat. Car and locomotive productivity was increased, and maintenance of equipment and facilities was improved. The figures attest to this. Car idle time at servicing points was reduced by 2.4 hours, and by 3.6 hours in freight operations. Car turnaround was sped up by 6 hours. But the plan target for this very important indicator was underfulfilled by more than 7 hours.

Handover is rightly called the pulse of rail operations. Handover was increased by 7,400 cars this year. Technical plan performance standards, however, are far from being fully achieved. The designated program of increasing traffic dimensions has not yet been implemented. And this is leading to enormous losses in loading resources. What comprises these losses?

More than 30 percent of train delays en route were caused by failure to effect smooth transfer between divisions and railroads. Train delays through the fault of locomotive depot personnel are substantial. This year they even increased, comprising 18.5 percent of total delays. 10.7 percent of delays were through the fault of the maintenance of way people and 7.6 percent were through the fault of car operations people.

Car flows were unsatisfactory throughout the entire first half of the year on the railroads of Kazakhstan and Central Asia, the Caucasus, as well as on the October and Volga railroads.

To date there has not been achieved an appreciable acceleration in the movement of car flows by sections. Train section speed remained at the 1982 level, at 31 kilometers per hour. There was virtually no improvement in departure of freight trains on schedule. The level of en route movement on schedule does not exceed 60 percent for the Gorkiy, Kuybyshev, Northern Caucasus, and Virgin Lands railroads, and it is only 46 and 42 percent respectively on the Volga and Southern Urals railroads.

Car and locomotive productivity, although somewhat higher than last year, failed to meet the target for these important indicators.

The aggregate of problems connected with ensuring stable, uninterrupted operation of locomotives, cars, signaling, interlocking, blocking, and communications

equipment, power supply, and with maintaining tracks and roadbed in proper condition is being resolved quite slowly. There still occur a great many breakdowns, restrictions and rejects in train operations due to inadequate reliability of equipment and errors in organization of equipment operation, maintenance and repair.

Diesel locomotives are maintained in an unsatisfactory manner on the Alma-Ata, Southeastern, Southern Urals, Central Asian, and Gorkiy railroads, and electric locomotives on the Transcaucasian Railroad. Consistent performance is obtained neither from diesel nor electric locomotives on the Sverdlovsk and Volga railroads.

On a number of railroads there has been a worsening of the condition of cars and quality of car inspection and maintenance in consists and at origination points. This applies first and foremest to the Western Siberian, Eastern Siberian, Southern Urals, Far Eastern, Western Kazakhstan, Kuybyshev, and October railroads.

Improvement of tracks, roadbed, and trackside facilities by all types of maintenance and repair is being conducted in a more organized fashioned this year. Major repairs were completed by 10 July on the heaviest freight routes. This has resulted in improved ratings and fewer kilometers of unsatisfactory track. The number of speed restriction warnings is still quite large, however. The most unsatisfactory situation in this regard is found on the Far Eastern, Odessa, Virgin Lands, Kemerovo, Central Asian, and Moscow railroad. On some railroads there has also been an increase in the number of signaling, interlocking, blocking, and communications equipment failures, as well as electric power failures.

One must also be concerned by the situation as regards train operations safety. On a number of railroads there has been an increase in the number of equipment problems in train and yard operations. A particularly large number of unpleasant consequences are caused by running restrictive signals, spontaneous rolling of cars, failure of journal bearings, and rail breaks.

Rail transportation has a substantial industrial base. It includes more than 100 plants. This represents an entire industry. Existing facilities, however, are being poorly utilized. Considerable difficulties in railroad activities are created as a result of the fact that plants fail to satisfy requirements in spare parts, major overhaul of locomotives, cars, and maintenance of way equipment. In the first half of this year alone TsTVR [Main Administration for the Repair of Rolling Stock and Manufacture of Spare Parts] plants failed to overhaul nine electric locomotive units, below-target undersupplied railroads substantial quantities of car wheelsets, cylinder liners, pistons, and piston rings for locomotive diesel engines. Railroads below-target underreceived 130 turnouts and five hump yard retarders. There continue to be a great many fully justified complaints about poor quality of repairs. Locomotives, cars, maintenance of way and other equipment spend a great deal of time at overhaul plants.

Considerable work is needed to achieve further strengthening of discipline among railroaders and to heighten a feeling of responsibility for the assigned

task. In the first half year 7,600 transport workers on the average each month did shoddy work in their job. There still occurs a high rate of absenteeism and reporting late for work. There are still plenty of petty thieves among railroaders, who engage in pilfering goods. All these disgraceful activities should be most vigorously combated. It is important that the enterprise and subdivision workforces themselves take up arms against those who do not value the honor of our profession and who bring shame upon the proud title of railroader!

It was emphasized at the meeting of the board that it is essential on each railroad, in each division and enterprise critically to analyze work performance results in the first half of the year and, guided by the decisions of the June CPSU Central Committee Plenum, the points and guidance contained in the speech by CPSU Central Committee General Secretary Comrade Yu. V. Andropov, to reach the appropriate conclusions.

The minister emphasized that our main task is to foster in every possible way, by our activities, successful implementation of our party's plans, resolution of cardinal economic problems and, on this basis, further strengthening of the economic and defense might of our homeland and increased national prosperity. This task is a party and patriotic task of the greatest national importance.

Further successful development of this country's economy is inconceivable without a sharp upswing in the performance of rail transportation. It is a matter of honor, the honorable duty of railroaders to overcome the fallbehind, to secure full, prompt, timely and efficient satisfaction of the needs of the nation's economy and population for rail service.

The task is stated as follows: to complete in the remaining two and a half years the rail service volume specified for the 11th Five-Year Plan. To achieve this it is necessary to make up for the fallbehind in shipment of freight which has occurred in the last two years.

This is a difficult task. Its accomplishment requires hauling 3.8 billion tons by the end of 1983. This means that 1,900 million tons of goods are to be delivered in the second half of this year. Next year, 1984, at least 3,900 million tons should be shipped, with the 4 billion ton figure to be surpassed in the final year of the five-year plan.

High performance figures have been targeted for freight traffic. In the second half of this year we must achieve not less than 3,580 billion ton-kilometers, 3,775 billion in 1984, and 3,880 billion in 1985, that is, we must achieve the targets specified by the five-year plan.

These are rail operations volumes which are very essential in order to ensure stable, even-paced activities by all branches and sectors of the economy. The rate of rail operations increase achieved in the first half of 1983 basically meets the assigned task. It is important not only to consolidate this rate of growth but to make every effort to increase it.

The volume of passenger operations must be increased, at the same time significantly improving quality of service at terminals and on trains. Minimum passenger traffic in the second half of 1983 should run 198 billion passenger-kilometers, 366 billion in 1984, and 369 billion passenger-kilometers in 1985.

In order to achieve the designated volumes of goods shipment, freight and passenger traffic, it is essential vigorously and persistently to improve all operations work and substantially to boost the level of utilization of rail facilities.

Car turnaround should be shortened by 0.54 days in the second half of this year. Next year we must gain an additional 0.2 days, and in 1985 reach the performance level targeted for the five-year plan.

In the second half of this year we must achieve a car productivity increase of 6.8 percent over the first half of the year, and further boost this figure in 1984 by an additional 4.8 percent, and by 1.3 percent more in 1985.

We must increase locomotive productivity in the second half of the year by 1.1 percent over the first half, and in 1984 achieve an addition of 30,000 ton-kilometers, adding another 16,000 ton-kilometers in 1985.

It has been precisely specified what must be done and on what timetable in order to make up for profit losses.

Specifying goals and determining performance figures is only the beginning. To achieve them we need constant painstaking organizational labor on the part of command personnel, party and trade union organizations, and we need initiative and enterprise. We must kindle and inspire all railroaders, so that they will boost the work pace hour by hour, day by day, achieving more and reaching one new performance level after another.

The board noted that the great production-technical potential of transportation provides full capability to achieve targeted performance levels. It expressed confidence that commanders, specialists, scientists, and workers of all the principal trades, by common labor and intellect, will overcome the fallbehind in rail transportation and will make it a reliable support in development of this country's entire economic complex.

Main Directions and Areas of Our Actions

The minister and the officials who addressed the expanded board session devoted considerable attention to what must be done and the reserve potential which must be mobilized in order to achieve targeted performance levels. What are the most important directions and areas here?

First of all, a radical improvement in the technology of the transportation process on the basis of the wealth of Soviet experience and know-how, scientific and technological advances.

Second, an all-out improvement in efficience of utilization of transportation facilities, accelerated elimination of bottlenecks, and requisite strengthening of facilities.

Third, A determined effort to correct deficiencies in maintenance of facilities and equipment and making them more reliable.

Fourth, persistent effort to improve organization of labor, in order to achieve the world's highest labor productivity.

Fifth, attention toward people and their needs. Tireless concern for maintaining a stable and permanent workforce, improving personnel skill level, and creating good working, living, rest and recreation conditions.

The speaker discussed a number of specific items which must be resolved.

Today, when the scale and intensity of work operations have sharply increased, when locomotives are traveling beyond the boundaries of divisions and even railroads, the system of management of the rail transportation process needs major improvement. Many experts have long since come to the conclusion that it would be highly beneficial to reduce the number of division transfer points and to enlarge train sections to 250-300 kilometers, equipping the train dispatcher's work station with modern communications, automatic monitoring and computer equipment.

The system of routine management of car flows is patently inadequate, both on the railroads and at the ministry. Dispatcher-inspectors and DGP [expansion unknown] spend most of their time collecting data, while practically nobody keeps an eye on organization of train traffic on the major routes, especially across transfer points, and providing trains with relief locomotives and crews. A suggested solution is to assign to dispatcher-inspectors supervision of operation of large system routes, with organization of locomotive and crew control at interchange points between railroads. Collection of all data on railroad operations should be assigned to computers. It is high time to settle these and other matters pertaining to improving rail operations management. They must be studied in detail and a decision made.

A key task in development of the nation's economy is that of boosting labor productivity. Railroaders have every possibility of achieving within these next few years the world's highest output per employee. This priority task has been clearly defined by the Ministry of Railways board. In the remaining two and a half years it is necessary to boost labor productivity by not less than 8.0 percent. It must be raised 2.8 percent in the second half of this year, by 2.9 percent in 1984, and by 3 percent in 1985.

There is considerable reserve potential in the area of streamlining utilization of labor resources. First and foremost we must reduce to a minimum work time losses and downtime. First of all we must seriously address the problem of improving organization of locomotive crew labor. Suffice it to say that in the loth Five-Year Plan, with a 6.2 percent increase in volume of rail operations, locomotive crew work time increased by 12 percent. To date the situation has also not improved in the llth Five-Year Plan. This can no longer be tolerated.

A vast reserve potential is offered by mechanization of manual labor, in which many railroaders are still engaged. We should more boldly proceed with combining jobs. To date more than 57 percent of yard train makeup personnel and 45 percent of yard locomotive engineers work with assistants. The level of combining jobs is poor in passenger, maintenance of way, freight, and car service.

increasing productivity is directly linked with extensive adoption of brigade forms of organization of labor and with improvement of cost accountability, employee wage and material incentive systems. There is plenty of work to be done in this area.

It is extremely important to continue efforts, and to conduct them more aggressively, toward reducing losses in utilization of rail line traffic capacity, classification yard handling capabilities, yard and industrial spur and siding freight handling capacities. Average transfer across railroad interchange points must be increased by approximately 10 percent.

There are considerable possibilities for decreasing traffic capacity losses. First of all we must increase the operational reliability of equipment and eliminate shoddy work in train and yard operations. It is very important to improve utilization of diesel locomotive runs and to keep the diesel locomotive fleet in a proper state of maintenance. Calculations indicate that as a result of improving their maintenance and utilization and achieving those performance figures which have already been achieved in the past, we can achieve an effect equivalent to putting into operation an additional at least 600 diesel locomotives. An additional at least 500 units can be obtained by correcting problems on ailing locomotives and by observing major overhaul standard downtime figures. An additional 500 can be obtained by properly organizing and handling yard-level maintenance and repairs. Such a substantial increase in the operational fleet will make it possible to boost diesel mileage.

Upgrading of major routes is of exceptional importance for improving operators. With existing technology, 100-120 million tons of freight per year are hauled on principal double-tracked lines, and 30-40 million tons on traffic-loaded single-track lines. In view of limited possibilities of expanding the rail network and especially of constructing load-relieving lines, we should increase the traffic capacity of existing lines. For example, for double-tracked lines we should establish technological modules of 150-170 million tons, and 55-60 million ton modules for single-track lines. Do we have such a technical capability? Experience indicates that this is achievable.

Spacings between trains could be reduced on the basis of improving automatic blocking systems. By increasing locomotive unit horsepower and tractive force, we can raise train schedule speeds. There is also reserve potential for further increasing railcar static load.

It is especially important to increase average train weight. Already today we can establish through trains made up of four-axle cars carrying coal, refined petroleum products, ore and metallurgical raw materials weighing 6,500 tons with yard track length of 1,050 meters, and 4,500-4,700 tons with track length of

850 meters. We have locomotives capable of operating as a lashup of a large number of units to pull such consists. We have experience in operating doubled and tripled trains weighing 10,000 tons. We must also devise and implement line operating procedures for running such trains.

Thinking forward to tomorrow, the future, we must devote close attention to development of rail transport facilities and providing rail transportation with new, highly-productive equipment. We must utilize all available resources for this. There are many questions here. First of all we must work in a purposeful manner to eliminate bottlenecks. This requires sharply increasing the volume of work performed by the manpower and resources of the railroads themselves. And each railroad should have a clearly-defined schedule specifying what is to be done and when.

The main directions to take in increasing the capabilities of our rail network are well known. They include electrification of rail lines, development of yards, lengthening of yard tracks, adoption of automatic block control and centralized dispatching, as well as computer hardware. They also include speeding up the rate of laying heat-treatment hardened rails and continuous rail. They include development and expansion of maintenance facilities for locomotives, cars, and maintenance of way equipment. It is important to ensure prompt and timely movement of new facilities on-line and to ensure that work-loading of these facilities is brought up to the designed levels as quickly as possible.

There are also very substantial tasks to be accomplished in the area of developing and building new equipment. We must speed up the designing and regular commercial manufacture of high-powered locomotives, 8-axle cars, high-output maintenance of way equipment, classification yard operations automation systems, new automatic block control equipment, centralized electrification, automatic locomotive signaling, as well as other advanced equipment.

Successful resolution of all problems, and particularly improvement in work organization and technology, development and provision of new transportation equipment is inconceivable without efficient organization of scientific and technical activities. Success in these undertakings lies in priority adoption of scientific and technological advances. It is important to work more aggressively to enlist scientists and transporation experts in solving immediate operations problems and in achieving accelerated adoption of the results of completed valuable research and development projects.

Transportation possesses great scientific and technological potential, and it must be efficiently utilized. Our research and development planning system needs a major overhaul. We should transition to formulating and implementing specific programs covering the entire science-to-production cycle, and we should efficiently coordinate the activities of all components.

The minister directed railroad officials' attention to the need to achieve a substantial improvement in social-services conditions for railroad workers. It is necessary first and foremost to carry out measures with railroad manpower, resources, and finances. A great deal can and must be done. We can and must speed up housing construction and maintain housing well. We must improve working conditions, public meal facilities, trade, personal services, medical, and

cultural services. We must expend and more fully utilize existing recreation facilities, sanatorium-health resort treatment facilities, and athletic facilities. All these are important conditions for reducing labor turnover and for decisively improving operations of the transportation industry.

Specific performance levels which are to be achieved this year, next year, and in the final year of the five-year plan for the major indicators on each main line were specified in the board's decision, with the participation of rail-road officials. Each division and enterprise must have a clear idea of what performance indices must be achieved, and each commander, each railroader must be clearly aware of what he personally must do to achieve this. Knowledge of the specific performance levels to be reached make the campaign to improve work performance and competition more effective and, what is most important, produce better results.

This is the program of action which must be implemented in order to catch up and transform rail transportation into a leading branch of the economy.

The board expressed confidence that railroaders will do everything they can to achieve the specified transportation performance improvement targets, will put out a total effort and will achieve successful accomplishment of the targets assigned by the Communist Party and Soviet Government.

The positive performance results achieved in the first half of this year have infused railroaders with energy and confidence that they can handle more difficult tasks and have inspired people to storm new heights and to achieve new performance levels.

\* \* \*

We must achieve the following performance levels by the end of the five-year plan:

freight shipment -- 4 billion tons, annually increasing total loadings by 100 million tons, beginning in 1983;

freight traffic -- 3,880 billion ton-kilometers;

passenger traffic -- 369 billion passenger-kilometers;

average freight train weight -- 2,910 tons;

section speed -- 33 km/h.

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CSO: 1829/287

RAIL SYSTEMS

# COLLEGIUM REVIEWS RAILWAYS MINISTRY'S CURRENT STATUS

Moscow GUDOK in Russian 15 Jul 83 p 1

[Unsigned article: "Primary Issues for Railroad Workers"]

[Text] Yesterday, July 14, an enlarged session of the Collegium of Railway Ministry took place, with the participation of railroad managers and a number of divisions.

In his report to the meeting, N.S. Konarev, the Minister of Railways, formulated the main goals of the railroad workers in light of the decisions of the Plenary Session of the CPSU Central Committee that took place in June, the Eighth Session of the Supreme Soviet of the USSR, and the directives of Yu. V. Andropov, the General Secretary of the CPSU Central Committee, and Chairman of the Presidium of the Supreme Soviet of the USSR.

In accordance with USSR Council of Ministers' recommendations, the results of railroad transport operation for the first six months, as well as for the first half of the five-year plan were closely analyzed. A set of effective measures directed toward further work improvement and the successful fulfillment of the 1983-year Plan were determined at the meeting. The program of specific actions for the present 1983, 1984, and 1985 was outlined.

The main problem is to compensate for losses which have been tolerated for the past two years and to fulfill the assignments of the 11th Five-year Plan. There are plans to greatly improve passenger service at the railroad stations and in trains. Each chief and each railroad worker should contribute personally to the struggle to achieve the standards established by the Collegium for principal indicators in railroad transport work.

Special attention is being paid to improving ideological and political-educational training in the area of transportation in order to make it more efficient. The importance of further all possible strengthening of discipline and organization of railroad workers was emphasized. The sense of responsibility of railroad workers for their assigned jobs and the national economy must be increased, as well as for meeting fully, efficiently and in a timely manner the requirements of the national economy and the populace for transportation. It is necessary to achieve that each railroad worker be profoundly aware that he is working in one of the key branches of the national economy, on whose activity

the successful development of the entire national economy depends, and to have him feel a sense of pride for his occupation.

The minister pointed out the need to accelerate the technological progress in railroad transportation and to improve the manner and methods of operation, and above all, to improve the management of the transportation process. It is important to improve hiring and placement of administrative personnel and to promote to managerial positions the most knowledgeable, educated, and skilled professionals who are able to work well with people. The training of railroad workers in economics must be made more substantive and more result-oriented. They must be taught to evaluate their productive activity from the viewpoint of economic efficiency. How fruitful the training and the entire area of economics are should be judged by how an enterprise or a subdivision utilizes work-time material, fuel, energy, and financial resources, as well as by final quantitative and qualitative indicators.

A key problem of the railroad workers is to find and utilize as fully as poseible the reserves in increased labor productivity. In the very near future we must develop a target plan that would improve this very important economic factor to the highest possible levels in the world.

The speaker clearly pointed out which reserves should be activated in order to achieve the increase in haulage planned for the five-year plan and to fulfill assignments in the chief indicators. It is especially important to substantially increase the train weight and capacity, increasing productivity of rolling stock, the train speed on certain road sections, and the railcar turn-around time. Many things are planned in order to improve the reliability of technical equipment in transportation, to improve their storage and maintenance, to introduce mechanization and automatization for labor-intensive operations and to eliminate "bottlenecks."

The Collegium devoted a great deal of attention to the need for improving working and health safety conditions for the workers. Work places should be improved and equipment brought up to required standards of NOT [Scientific Organization of Labor], as well as providing workers with comfortable work clothes. Maximum attention should be paid to the improvement of living conditions for workers, as well as consumer goods, health care, and establishment of favorable conditions for rational utilization of leisure time. As we improve output efficiency, we must at the same time resolutely put an end to work-time violations, especially among locomotive crews.

Taking part in the discussion were the following railroad directors: A.S. Goliusov, Southeastern Railroad; G.M. Fadeyev, Krasnoyarsk Railroad; G.G. Vidyakin, Transbaykal Railroad; E.S. Valikov, Kemerovsk Railroad; A.F. Basov, Gorkiy Railroad; A.P. Platonov, Azerbaijan Railroad; V.M. Predybaylov, Northern Railroad; the deputy directors were: A.A. Puchko, Southern Railroad; V.B. Nikolayev, the West Siberian Railroad; A.S. Golubchenko, Tselinnaya Railroad. Also participating were V.S. Arcatov, Director of the Main Administration of Signaling and Communications; B.D. Nikiforov, the Deputy Minister of Railways; and S.A. Voytovich, the Deputy Minister for Transport Construction.

The Collegium meeting was addressed by K.S. Simonov, the Director of the CPSU Central Committee Transport and Communication Department.

The Collegium members have expressed their confidence that the railroad workers' inspired by the CPSU Central Committee Plenary Session decisions, will make every effort to use their energy and creative initiative in order to fully overcome the lag and achieve a rapid increase in the railroad transport operation, and thus transform the railroad transport system into a highly reliable link within the entire economy of the country.

Participating in the Collegium were: N.I. Kovakev, the Chairman of the Central Committee of the Railroad Transport and Construction Workers Union; G.F. Ivanovskiy, Deputy Director of USSR GOSNAB; K.V. Kulayev, the Chief of Transport and Communication Department within the Administration of the USSR Council of Ministers; and other high-ranking officials from the CPSU Central Committee, the USSR Council of Ministers, USSR GOSPLAN, USSR GOSSNAB, USSR Peoples Control Committee, the USSR Procurator's Office, the Ministry of Transport Construction, the Union Central Committee, the local Party organs, the most active party and union members of MPS [USSR Railways Ministry], as well as the scientists working in the transportation area.

# GIN'KO SCORES SOUTHEASTERN RAILROAD OFFICIALS FOR SHORTCOMINGS

Moscow GUDOK in Russian 21 Jul 83 p 2

[Article by V.N. Gin'ko, First Deputy Minister of Railways: "A Dark Spot"]

[Text] More than five months ago an article with the above heading was printed in our newspaper. The Administration of the Southeastern Railroad have essentially brushed off the criticism, and readers have not learned anything about measures that were undertaken. The editorial board then appealed to the Main Administration of MPS [USSR Ministry of Railways]. Again, there was no response.

Due to the violation of deadlines for responding to the critical press article by the Ministry of Railways, a directive has been issued. Its complete text follows below:

The 15 February 1983 issue of GUDOK (No 38) published the article "A Dark Spot" by comrade Khursik, GUDOK special correspondent, that noted the serious violations that have been allowed in carrying out the investigation of the circumstances of the freight train wreck, the non-correlation of document data regarding the actual state of the railways, the low level of organization with respect to utilization of technical equipment for monitoring the state of the railways and other shortcomings in railway management on the Southeastern Railroad.

The management of the Southeastern Railroad, and chiefly comrade Poliyenko, the Deputy Director in charge of railways, instead of working out and implementing the crucial measures for eliminating the disclosed violations that were covered in the article "A Dark Spot", have limited their activities to drafting a program for 1983 on improving the operation of railway flaw detection equipment. For more than three months, Comrade Poliyenko did not inform the editorial board about the measures that were being undertaken.

A special committee headed by Comrade Butakov, Deputy Director of the Main Railway Administration was established by the Railway Ministry in order to thoroughly examine the negative facts presented in the article and to respond to the editors. However, Comrade Butakov as the Head of the Committee did not organize the work of the Committee properly and did not personally establish effective supervision over the liquidation of the serious shortcomings disclosed in the article. He removed himself from carrying out this important assignment,

turned the case over to others, and did not respond to the editorial board regarding the issues raised by the newspaper.

Comrade Sen'kovskiy, Chief Inspector of the Main Railway Administration repeatedly carried out inspections on the Southeastern Railroad during the current year; however, he did not demonstrate sufficiently high standards from managers of the line with respect to improving management of the line and did not allot necessary care to issues outlined in the article, "A Dark Spot".

The Ministry of Railways has ordered that Comrade Poliyenko, Deputy Director of the Southeastern Railroad be issued a reprimand for displaying foot-dragging and irresponsibility in reacting to the critical article in the press, violating response deadlines of the editorial board of GUDOK with regard to measures that are being undertaken; that Comrade Sen'kovskiy, Chief Inspector of the Main Railways Administration be issued a reprimand for poorly monitoring the execution of orders from the Railroad Ministry that were directed toward improving maintenance of the railway, efficient use of technical equipment to check condition of the line, and strengthening operations discipline at the railroad departments; to point out the Comrade Butakov, the Deputy Director of the Main Administration, the personal lack of discipline he displayed in carrying out the important task he was assigned, and underestimating the importance of urgently solving the problems that had been pointed out in the newspaper by the Main Administration; that Comrade Morozov, Deputy Minister and the Director of the Main Administration of Railways must set up verification procedures over the completion of projects outlined at the Yugo-Vostochnaya Railroad in the 4th quarter. of this year in order to eliminate the shortcomings mentioned in the article "A Dark Spot" and to meet with Comrade Poliyenko, Deputy Director of the Yugo-Vostochnaya Railroad at the Railroad Ministry.

All railroad managers and branch managers must become more exacting toward their deputies, service and department managers in taking active measures with respect to the critical statements by the mass information media.

### MARITIME AND RIVER FLEETS

### BRIEFS

YUGOSLAV SHIPS FOR USSR--In accordance with contracts of the All-Union Foreign Trade Association Sudoimport [not further identified] with the Split Shipyard (SFRY), this enterprise has begun constructing the first in a series of nine new tankers which will be turned over to Soviet clients at the beginning of 1984. The vessel's deadweight is 16,400 t, its length is 153 m and its width is 22 m. Currently the Yugoslav shipyards in Belgrade, Rieka, Pulj, Trogir and other cities are constructing on Soviet orders sea and river tugboats, tankers, railway ferries and vessels for serving drilling platforms in open sea. Diesel generators and radionavigational and other vessel equipment are being delivered from the USSR for completing them. [Text] [Moscow EKONOMICHESKAYA GAZETA in Russian No 22, May 83 p 21] 9817

NEW SHIPPING ROUTE--Vyborg (Leningrad Oblast) -- A new shipping route was opened by rivermen of the Northwestern Steamship Company. It connects the port of Lappeenranta and other Finnish harbors with Moscow's Yuzhnyy port. The motorship "Biryuchki" was the first to make the voyage via the Saimaa Kanal and Volga-Balta. Some 10,000 t of paper will be delivered to the capital via the new route during the navigation season. It would have required several railway trains to transport "Cooperation of neighboring collectives, which operate on the basis of a continuous plan-schedule, helps in distributing the load among various types of transportation," said steamship company chief V. Fomin. "This ensures their harmonious work and rational use of equipment." The rivermen have taken over a considerable share of cargo flow and this will make it possible to relieve railway mainlines. The rivermen are planning to transport more than 1 million t of cargo which was formerly transported by railway during the navigation season. The schedule has been coordinated with rivermen of the Kama, Volga and other basins to which metal, equipment and foodstuffs cargo is directed from the Neva harbor. Colleagues of Leningrad rivermen have prepared quays and access routes in advance and assigned the necessary number of docker brigades so that vessels would not lose time in waiting to be unloaded. As a result of assistance by rivermen and motor vehicle drivers, Leningrad transportation workers have pledged to release 140,000 cars this year. [Text] [Moscow SOVETSKAYA ROSSIYA in Russian 8 May 83 p 2] 9817

MAGADAN CONTAINER ROUTE--Magadan--A container sea route, which linked Magadan with ports in Eastern Chukotka, is in operation. The containership "Mekhanik Zheltovskiy" has left the Nagayeva Bay for Provideniya port on the first current Arctic voyage. In its holds there are thousands of tons of manufactured goods

and foodstuffs for coastal villages, miners settlements, geological prospecting expeditions and reindeer breeding sovkhozes of the Chukotsk Autonomous Okrug. The possibility of opening container sea routes between Magadan and Chukotsk ports of Provideniya, Egvekinot, Anadyr and Pevek presented itself after commissioning of a container terminal in the Nagayeva Bay. Dozens of vessels which operate between Magadan and Far Eastern ports are also processed at this quay. Moreover, processing of a containership is done three-four times faster than of an ordinary vessel at an ordinary quay. [Text] [Moscow SEL'SKAYA ZHIZN' in Russian 4 Jun 83 p 1] 9817

CONTAINER TRANSPORTATION EFFICIENCY--Vladivostok, 5 Jun--Scientists of the Far Eastern Scientific Center of the USSR Academy of Sciences together with sectorial scientific research institutes and VUZs of the region have completed, as part of a special "Far East" complex scientific and economic program, the analysis of economic efficiency in transporting cargo in containers by sea. Three versions were worked out on two coastal routes between Nakhodka and Magadan and Vladivostok and Petropavlovsk-Kamchatskiy: delivery of cargo in containers of reduced weight, in 5-ton containers and in special containerships. The latter was the most acceptable and economically efficient version. The cost of transporting large 20-ton containers is reduced by 40 to 60 percent. Moreover, the fleet's carrying capacity is doubled by accelerating the turnover of containers. Calculations of scientists were confirmed in practice. The export-import and transit sea transportation now operating in the Far East justify themselves: every 20-ton container brings R400 in profits to the state. Further introduction of containerization on a broad scale will have a positive effect on interaction of all types of transportation in transportation centers and will reduce the idling of the rolling stock. [By PRAVDA correspondent N. Bratchikov] [Text] [Moscow PRAVDA in Russian 6 Jun 83 p 2] 9817

GOODS FROM INDUSTRIAL WASTE--Industrial enterprises of Belorussia's Main Administration of the River Fleet [Glavrechflot] are successfully fulfilling the plan for production of consumer goods. They are producing various household goods from industrial waste. The Gomel'skiy Shipbuilding and Ship Repair Plant, for example, has mastered the production of stepladders long time ago. The Pinskiy Shipbuilding and Ship Repair Plant [SSRZ] is producing tens of thousands of rubles worth of loops, rings and sleeves for ski poles. Along with their main production, the Rechitsa shipbuilders have organized production of window frames this year. [By RECHNIK BELORUSSII correspondent N. Fedorenko] [Text] [Moscow VODNYY TRANSPORT in Russian 11 Jun 83 p 4] 9817

NEW VOLGA FLEET MOTORSHIP--Rybinsk (Yaroslavl Oblast), 15 Jun (TASS)--The Volga transportation fleet was supplied with one more type of specialized vessels. A vegetable-hauling motorship--a leading vessel in a new series--left the quay of the Shipbuilding Plant imeni Volodarskiy today on its maiden voyage to Gorkovskiy port. Such floating storehouses will help in solving the problem of speedy delivery of vegetables and fruits from the lower reaches of Volga without losses. [Text] [Moscow PRAVDA in Russian 16 Jun 83 p 4] 9817

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### BRIEFS

IMPROVED FREIGHT TRANSPORT--Odessa--The creation of a new transport section, an intercity one, has made it possible to speed up the transport of small-volume and single-item industrial cargo. It was organized at the Odessa Motor Vehicle Transport-Expediting Enterprise for Cargo Shipping. Previously when shipping by rail such cargo would have to wait for a considerable time at freight stations for more cargo to fill up the railroad cars. Processing at the marshalling yards also took up a lot of time. Now tractor-trailer rigs transport this cargo "from door to door" without transshipment. Because of this, the transport management system has been further developed. On its basis there is a planschedule which precisely specifies the shipment times, addresses of the clients, and other necessary data. By agreement with related enterprises in other oblasts, incidental loading of trucks is accomplished there and empty runs are eliminated. With the creation of the section, up to 500 railway cars are released monthly for other transport. [Text] [by V. Barskiy] [Moscow SOTSIALISTICHESKAYA INDUSTRIYA in Russian 20 Feb 83 p 1] 12424

IMPROVING RAILROAD CAR MAINTENANCE--In response to the article "The Vladivostok Terminal Could Work Better" (No 17): Cases have occurred of delivery to the ports of Vladivostok and Nakhodka of railroad cars for loading which are not in working order or not cleaned out. The guilty Vladivostok Railroad Section workers were held accountable. At the same time it must be noted that supervisors of these ports have not yet organized maintenance of railroad cars and containers based on the practices of Moscow enterprises. In the article it is justly noted that in the ports of the Maritime Kray not enough care is taken that rolling stock remain undamaged. More than 2,000 cars were damaged in these ports in just the first quarter. The Ministry of Railroads obliged chief of the Far Eastern Railway Comrade Yatsevich to organize, jointly with port supervisors, maintenance of cars and containers based on the practices of Moscow enterprises, to improve the use of specialized flatcars for transporting containers, and to eliminate cases of delivery for loading of cars unfit for shipping. [Text] [by V. Gin'ko] [Moscow EKONOMICHESKAYA GAZETA in Russian No 23, Jun 83 p 14] 12424

MURMANSK CAR MAINTENANCE IMPROVED--Railroad car maintenance brigades have been created in each freight region of the Murmansk commercial seaport based on the practices of Moscow enterprises. An agreement for the maintenance of 1,000 units of rolling stock has been concluded. The V. Savkov brigade is energetically working on sanitation of railroad cars in the second freight region. Qualified dock workers, gas electric welders, and workers of other specializations have joined the brigade. Each person in the brigade has mastered several

closely related professions. Strong discipline, high productivity, and outstanding quality of work performed—that is the labor mark of the collective. Since the beginning of the year more than 70 cars which required complicated repairs and approximately 100 cars with small defects were put in order. In order to make repairs faster, welding units were placed directly next to where the cars were being processed. There is also a spare welding unit which can be delivered on a lift truck to any point in the port where it is urgently needed. [Text] [by V. Gres'ko] [Moscow EKONOMICHESKAYA GAZETA in Russian No 23, Jun 83 p 14] 12424

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